DANA RESERVE SPECIFIC PLAN

DRAFT ENVIRONMENTAL IMPACT REPORT

SCH NO. 2021060558

PREPARED FOR

County of San Luis Obispo
Planning and Building Department
976 Osos Street, Room 200
San Luis Obispo, CA 93408

VOLUME 2: APPENDICES A–E

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PREPARED BY

SWCA Environmental Consultants
1422 Monterey Street, Suite C200
San Luis Obispo, CA 93401

APPENDIX A

Dana Reserve Specific Plan

DANA RESERVE

SPECIFIC PLAN | DECEMBER 2021

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Table of Contents

Chapters

Appendices

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Exhibits and Tables

List of Exhibits

List of Tables

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1 Introduction

1.1 Scope and Legal Authority for the Specific Plan

Under California Law (Governmental Code Section 65450-65457) a specific plan is a planning tool that allows a county/community to articulate a vision for a defined area and apply guidelines and regulations to implement that vision.

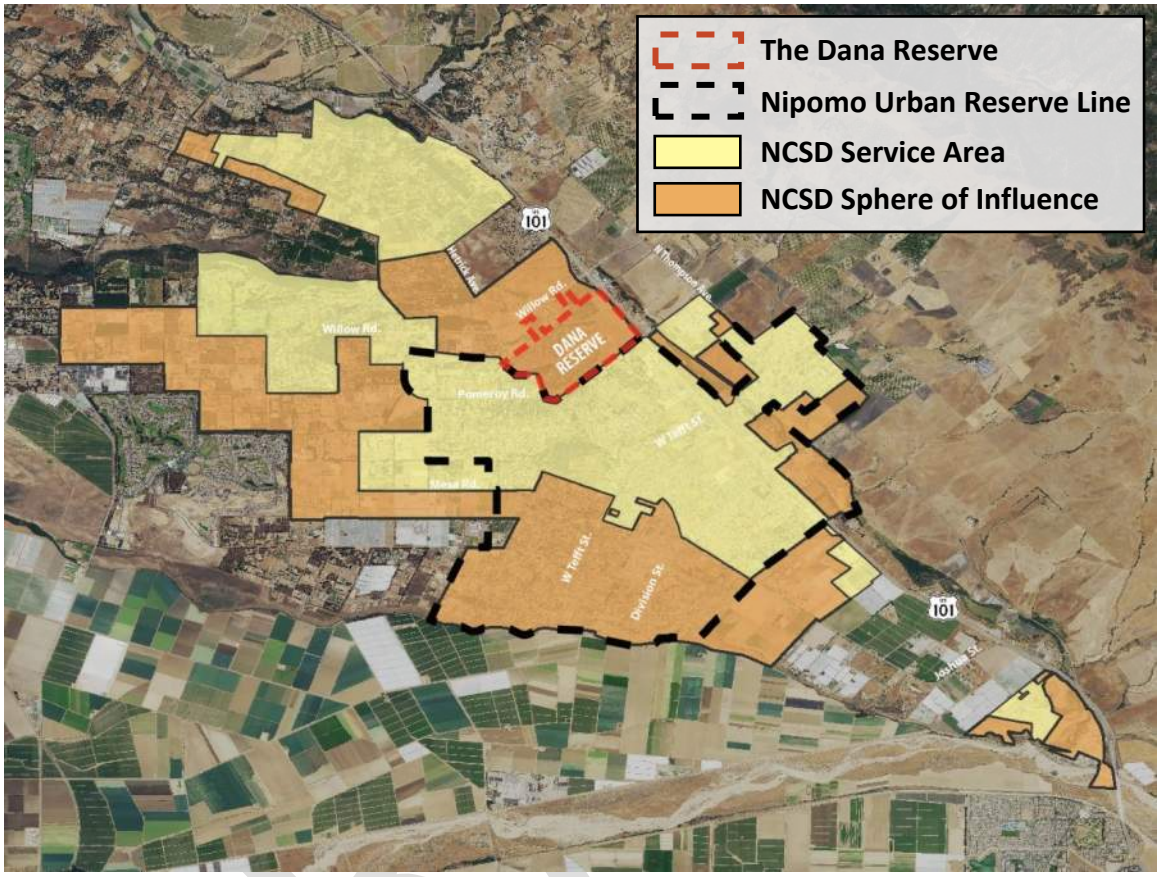
The Dana Reserve Specific Plan (DRSP) provides a vision and guides development of "The Dana Reserve" (project) by defining land uses and development standards, circulation, parks and trails, and infrastructure for the future residential, commercial, and open space uses. The DRSP also provides a phasing/implementation plan and public facility financing options to accommodate this future development.

1.2 Location and Setting

The DRSP is located in the southern portion of San Luis Obispo County, California (see Exhibit 1-1). This property is immediately north of the Urban Reserve Line of the Nipomo community. It is bounded by Willow Road and Cherokee Place to the north, existing residential ranchettes to the south and west, and U.S. Highway 101 to the east (see Exhibit 1-2). The property is less than a mile north of the Tefft Street corridor, a primary commercial corridor servicing the community, and is within 1,500 feet of the prominent Nipomo Regional Park from the property's southwest corner.

Exhibit 1-1: Regional Location

Exhibit 1-2: Community Location



The DRSP consists of three parcels totaling approximately 288 acres and is undeveloped. It includes the 275-acre western portion of the property formerly referred to as Cañada Ranch (APN 091-301-073) as well as two additional 6.5-acre properties to the north that will provide access to Willow Road (APN 091-301-030 and 091-301-031).

The DRSP is located directly adjacent to the Nipomo Urban Reserve Line (URL) and is identified in the Nipomo Community Services District (NCSD) Sphere of Influence, which identifies areas where water and wastewater services are planned to be extended in the future. As part of the DRSP, these properties will be brought into the URL and the NCSD service area through the Local Agency Formation Commission (LAFCO) processes.

1.3 Planning Area Character

1.3.1 Historic Setting

The community of Nipomo has a rich history in agriculture and a strong connection to the Dana Family and Dana Adobe. The Dana Reserve property was once part of the Dana Rancho Nipomo and was owned by the Cañada family beginning in 1912. The property has mainly been used for seasonal grazing for the last 100 years. There are no structures or other improvements on the site. No formal

roads exist on the property, although informal unpaved ranch roads traverse portions of the property.

1.3.2 Cultural Setting

The project has been designed to protect and avoid identified cultural resources, as further discussed in Chapter 3.

1.3.3 Natural Setting

The property has three primary natural features**.** These include open grasslands in level areas, oak savannahs on gently rolling hills and oak woodlands along several steeper slopes, and small clusters of native plants. Each of these features will be incorporated into the design of the project or mitigated off-site. There are no creeks, wetlands, or riparian habitats present on the property. The soil types are Class III and IV non-prime.

Exhibit 1-3: Aerial Photograph of the Dana Reserve Property (as of 2018)

1.3.4 Existing Setting

Portions of the DRSP property can be viewed from U.S. Highway 101, as shown below. The property also borders Pomeroy Road at the southwest, Hetrick Avenue to the west, and Cherokee Place to the north.

Exhibit 1-4: View from U.S. Highway 101 Looking Southwest (Source: Google Earth 2018)

1.4 Specific Plan Vision and Goals

1.4.1 Vision

The DRSP is a master-planned neighborhood that is envisioned to capture the essence of the central coast lifestyle – where living and working locally, celebrating family, and recreating are combined..

The DRSP will provide extensions of existing public roadway networks through the property in order to enhance access to Willow Road and the broader community roadway network.

Overall design and building architecture of the DRSP is intended to reflect the rural history of the property, while a diversity of housing types have been included to create new opportunities for home ownership or apartments.

To generate new employment opportunities and provide access to day-to-day goods and services, a village commercial center and flex commercial area have been included. These provide opportunities for businesses, a hotel, small daycare center, and an educational campus for life-long learning and job training.

By integrating a network of walking, bicycling, and equestrian facilities within the DRSP area, both the existing community as well as future residents will find new avenues for embracing a healthy lifestyle.

Architecture connects to the area history, while providing indoor/outdoor community spaces.

A variety of residential home types/sizes creates expanded opportunities for home ownership and apartments.

Pedestrian and bicycle lanes connect residents to parks and open space areas.

1.4.2 Specific Plan Goals and Objectives

The following goals and objectives have guided the design, layout, and configuration of the DRSP:

Goal 1: **Provide a mix of land uses that provides a range of amenities accessible to residents and community members. To respect Old Town Nipomo, the small, neighborhood-oriented village commercial area has been designed to complement, rather than compete with this area.**

Goal 2: **Provide public neighborhood park and pocket parks and open space areas within each residential neighborhood, linking the neighborhoods together through a network of trails and open spaces.**

Goal 3: **Incorporate the rural history of the community through architectural design, as guided by Appendix A – Design Guidelines.**

Goal 4: **Provide a diversity of housing types and opportunities for home ownership and apartments, including affordable homes consistent with the goals and polices of the Housing Element of the General Plan, the County's Inclusionary Housing Ordinance, and regional housing needs.**

Goal 5: **Create new employment and job training opportunities for the community and the broader South San Luis Obispo County area.**

Goal 6: **Enhance circulation for the DRSP and existing community by continuing the existing public roadway network through the property to connect to Willow Road, providing a new park and ride lot to encourage carpooling, and creating new public transportation points of connection to facilitate public transit use and reduce single-occupant automobile use.**

Goal 7: **Integrate a network of walking, bicycling, and equestrian facilities to connect on-site residential neighborhoods and the broader community.**

Goal 8: **Maintain the large, centrally located oak woodland area as a site feature. Minimize impacts to special status plants and animals on-site.**

Goal 9: **Meet the Building Code requirements for energy efficiencies and water savings.**

Goal 10: **To reduce uncertainty in planning for and securing the orderly development of the Specific Plan area.**

Goal 11: **To provide effective and efficient development of public facilities, infrastructure, and services appropriate for the Specific Plan area.**

Goal 12: **To meet the requirements of the NCSD District Code to ensure that the DRSP constructs the water and wastewater infrastructure necessary to serve the project without adverse impacts on the NCSD's ability to serve existing and future users.**

1.5 Specific Plan Format

The DRSP is under the County of San Luis Obispo (County) jurisdiction. The property is designated as an expansion area under the South County Area Plan (SCAP) Section 4.5 and 4.8 as well as the San Luis Obispo County Code – Title 22, Land Use Ordinance (LUO) Section 22.98.072. The General Plan requires that a specific plan for this site be adopted prior to adjusting the URL of the Community of Nipomo. This process will also include the request for annexation to the NCSD.

The DRSP provides a guide for future private and public development in conformance with the requirements set forth in California Government Code §65450 through §65457. The DRSP provides a bridge between the County's General Plan and detailed plans such as development plans and subdivisions. It directs all facets of future development within the DRSP area and includes the following chapters and appendices:

- *Chapter 1 – Project introduction and background;*
- *Chapter 2 – Designation of land uses and development standards;*
- *Chapter 3 – Overview of open space, recreation, and conservation;*
- *Chapter 4 – Designation of circulation elements;*
- *Chapter 5 – Location and sizing of infrastructure;*
- *Chapter 6 – Ensuring adequate public facilities;*
- *Chapter 7 – Options for development and financing methods for public improvements;*
- *Chapter 8 – Financing Public Infrastructure;*
- *Appendix A – Design Guidelines;*
- *Appendix B – Phasing and Public Improvements Implementation Matrix;*
- *Appendix C - Relevant General Plan text; and*
- *Appendix D – Policy consistency analysis.*

1.6 General Plan and Land Use Ordinance Guidance for Cañada Ranch

The SCAP description and policies applicable to the Cañada Ranch (now known as Dana Reserve) were adopted in 1994, almost 25 years ago. At the time, the objectives of the SCAP were aimed at job creation opportunities as well as addressing the jobs housing balance in Nipomo. Although the SCAP described the broad objective for job creation, it did not identify specific requirements for the type, size, or scale of these expected uses. The SCAP also indicates that housing should be provided on the Cañada Ranch site, again without identifying the type, size, or scale of the residential development. Appendix A of this document provides a summary of existing SCAP policies applicable to the Cañada Ranch.

Since the adoption of the SCAP, much has changed in the State and in the County. A period of significant economic expansion (housing bubble) and the "great recession" (the housing crash)

occurred. As of the writing of this document and into the foreseeable future, California faces significant challenges in providing housing for the States' growing population. Prices and rents for existing housing have increased dramatically and are continuing to increase. For the first time in many years, the State has begun to intervene in local housing policies. During 2018-2020, over 15 housing bills were passed by the State that set standards, incentives, and enforceable requirements for local agencies to meet their housing goals. More recently, at the time of preparation and review of the DRSP, California, the nation, and the world experienced a pandemic caused by the COVID-19 virus that has further exacerbated housing challenges.

1.7 Goals and Consistency with the General Plan

The DRSP is located in the County of San Luis Obispo's jurisdiction and is therefore under the jurisdiction and governance of the County's General Plan. The General Plan sets policy direction for allowable land uses for both public and private lands and acts to provide applicable review bodies appropriate guidance and direction for making future land use decisions. There are seven required general plan elements, which include: Land Use, Circulation, Open Space, Conservation, Noise, Housing, and Safety. In addition to these required elements, the County of San Luis Obispo has also adopted five optional elements, which include Agriculture, Offshore Energy, Economic, Master Water and Sewer Plan, and Parks and Recreation. These elements are implemented through County of San Luis Obispo adopted area plans, community plans, and specific plans as well as other codified ordinances.

The DRSP has been designed to meet the goals and objectives established in the County's General Plan by providing a framework for future development of the property. The DRSP is consistent with, and serves as an extension of, the County's General Plan. The policies and standards in the DRSP will take precedence over more general policies and standards during the review of private and public development projects within the DRSP area. In situations where policies or standards relating to an aspect of development have not been provided in the DRSP, the existing policies and standards of the County's General Plan and LUO will apply.

1.8 Land Use and Circulation Elements

The Land Use and Circulation Elements (LUCE) is the over-arching guidance document for the County and addresses the County's land use pattern and circulation system. The LUCE consists of 1) Framework for Planning, 2) South County Area Plan, 3) Community Plan, and 4) Official Maps. It identifies the layout and intensity of land uses, including housing, commercial, industrial, open space, education, public facilities, and other categories of both public and private uses. The LUCE also establishes a balanced circulation network that includes both existing and proposed road network system improvements.

1.8.1.a. Framework for Planning (Inland)

The Framework for Planning (Inland) contains polices and procedures that apply to the unincorporated area outside of the coastal zone, defining how the LUCE is used together with the Land Use Ordinance and other adopted plans. It also explains the criteria used in applying land use categories and combining designations to the land, and the operation of the Resource Management System.

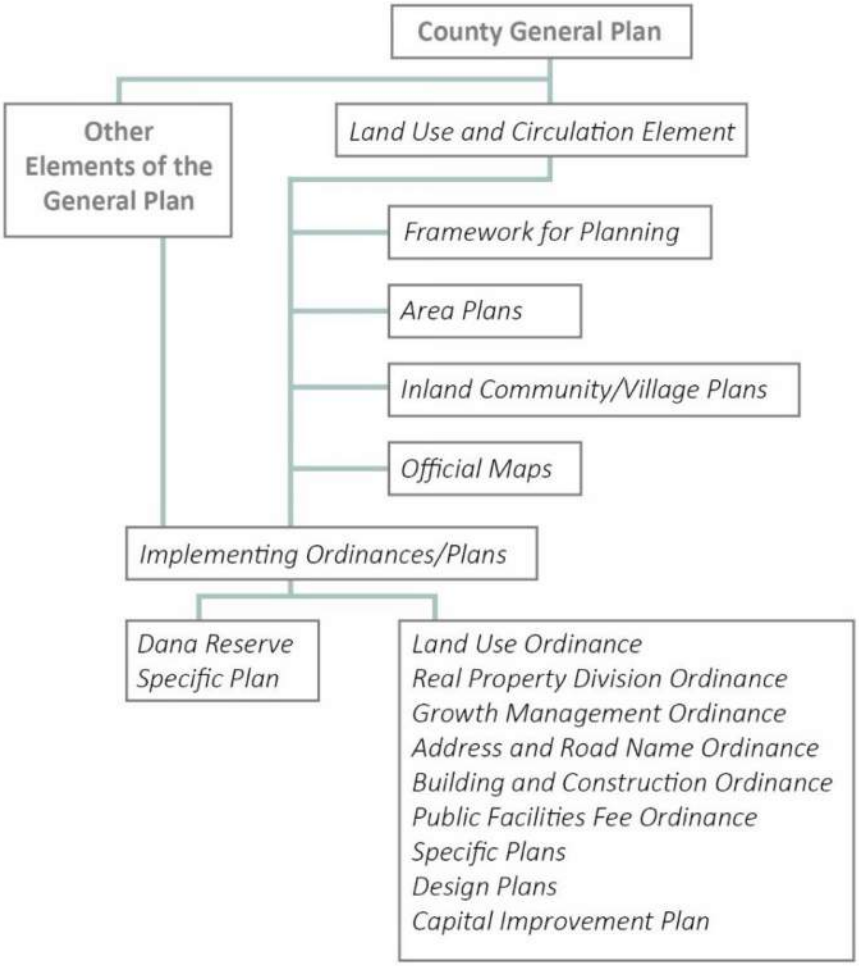
1.8.1.b. South County Area Plan (SCAP)

The South County Area Plan is encompassed within the Land Use and Circulation Elements (LUCE) of the County General Plan. This plan sets land use strategies to balance housing types, economic growth, conserve resources, and integrate a well-balanced land use pattern throughout South County area, including the Nipomo Mesa.

1.8.1.c. Nipomo Community Plan

The Nipomo Community Plan (Community Plan) sets a vision for the future of the community and the proposed land uses and circulation/infrastructure improvements at the community level. The Community Plan is also part of the LUCE of the County General Plan and is intended to be consistent with and implemented by other County plans, policies, and programs.

Exhibit 1-5: Relationship of DRSP to Other Adopted County Documents



1.9 Implementing Ordinances/Plans

Existing implementing ordinances and plans of the County include the Land Use Ordinance, Real Property Division Ordinance, Growth Management Ordinance, Address and Road Name Ordinance, Building and Construction Ordinance, Public Facilities Fee Ordinance, Specific Plans, Design Plans, and Capital Improvement Plans.

The DRSP is the implementing plan for the Dana Reserve property. While there may be instances where a portion(s) of the County's existing ordinances and plans apply to future development in the DRSP, the DRSP will take precedence. Where the DRSP is silent on a topic or matter, the relevant County ordinance or plan will prevail.

1.9.1.a Land Use Ordinance – Inland (Title 22)

The Land Use Ordinance – Inland (Title 22) provides standards for land use regulations and site-specific development that guide and regulate the size, shape, and type of use for development within the non-coastal areas of the County. The DRSP customizes some of the standards and regulations found within Title 22 to implement the DRSP vision. The DRSP document will take precedence and where the DRSP is silent on a topic or matter, the Land Use Ordinance – Inland requirements will prevail.

1.9.1.b Real Property Division Ordinance (Title 21)

The Real Property Division Ordinance (RPDO) regulates division of land in the County to promote the orderly development of real property. Applicant requirements pursuant to the Subdivision Map Act are enacted in this title. Subdivision activity within the DRSP area must be consistent with the RPDO.

1.9.1.c San Luis Obispo County Design Guidelines

The San Luis Obispo County Design Guidelines document consists of design objectives, guidelines, and examples that are intended to help retain and enhance the unique character of the unincorporated communities and rural areas of San Luis Obispo County. Since the DRSP will provide its own design direction to inform the design and planning of future development, the County's Design Guidelines document will not be applied in the review of development projects within the DRSP area. Applicants should refer to Appendix A – Design Guidelines for DRSP specific design direction.

1.9.1.d San Luis Obispo County Bikeways Plan

The San Luis Obispo County Bikeways Plan (Bikeways Plan) prioritizes bikeway facilities in the unincorporated areas of the County. It recognizes a variety of facilities, including bicycle lanes, routes, parking, connections with public transportation, educational programs, and funding. The DRSP has taken guidance found in the Bikeways Plan and expanded it to provide an interconnected bikeway system within the DRSP that connects to existing bicycle facilities adjacent to the project area. Since the DRSP provides its own standards to implement and enhance the Bikeways Plan, the Bikeways Plan will not be applied in the review of development projects within the DRSP area.

2 Land Use and Development Standards

2.1 Introduction

This Chapter contains the land use goals, policies, development standards, and allowable uses applicable to the DRSP. In general, the DRSP consists of both single-family and multi-family residential land uses as well as commercial land uses planned near the project's frontage adjacent to U.S. Highway 101. More specifically, individual commercial land uses include a village center, flex commercial, neighborhood barn, hotel, daycare center, as well as an educational/training campus. A component of the DRSP includes areas reserved for public recreation, pocket parks, trails, and open space.

Public Benefits Associated with Adoption of the Specific Plan

As part of the DRSP, a variety of public benefits will be included. A few highlights of the public benefits proposed include a day care center, satellite junior college campus for Cuesta College, and affordable housing in excess of the County's Inclusionary Housing Ordinance requirements, as described further within this Chapter.

2.2 Land Use Designations

Land uses determine the intended future use of each parcel of land within the DRSP. They describe uses and development standards. The proposed land uses are separated into three primary categories, which include Residential, Commercial, and Recreation and Open Space.

The DRSP includes the following land use designations:

Residential Land Uses

- *Residential Single-Family-1 (DR-SF1)*
- *Residential Single-Family-2 (DR-SF2)*
- *Residential Multi-Family (DR-MF)*

Commercial Land Uses

- *Village Commercial (DR-VC)*
- *Flex Commercial (DR-FC)*

Recreation and Open Space Land Uses

- *Recreation (DR-REC)*
- *Open Space (DR-OS)*

As part of the DRSP, no change of the existing Residential Rural land use designations are proposed for APN's 091-301-031 and 091-301-030 and they are included within the DRSP only for the purposes of providing access and infrastructure as described herein.

Table 2.1 includes an overview of all proposed land uses and the associated numeric information within the DRSP area. This table lists the proposed land uses and is correlated with the Land Use Map (Exhibit 2-1a/b) and Concept Master Plan Map (Exhibit 2-2a/b).

Table 2.1: Land Use Summary

Land Use	*Acres*	*Density Range*	*Potential Units*	*Potential Square Feet[2]*
RESIDENTIAL				
Residential Single-Family-1 (DR-SF1) Residential Single-Family-2 (DR-SF2)	132.6[1] 16.9[1]	4 - 7 du/ac 7.5 - 8.5 du/ac	707 124	
Residential Multi-Family (DR-MF)	23.5[1]	18-24 du/ac	458	
Recreation (DR-REC) • *Public Park (10 ac)* • *Equestrian Staging (1 ac)*	11[5]			
Pocket Parks[3]	-			
Primary Roads	21.9			
Residential Rural (RR) – Existing	10			
SUBTOTAL	*215.9*		*1,289*	
COMMERCIAL AND NON-RESIDENTIAL				
Village and Flex Commercial Visitor Serving / Hotel Education	22.3[1]			113k sf 60k sf 30k sf
Internal Neighborhood Roads[3]	-			
Park and Ride[4]	-			
SUBTOTAL	*22.3*			*203k sf*
OPEN SPACE/RECREATION				
Open Space (DR-OS) ○ Open Space ○ Trails ○ Basins	49.8[5]			
SUBTOTAL	*49.8*			
TOTAL	***288.0***		***1,289***	***110-203k sf***

Notes:
[1] All acreage and potential units can be adjusted up to 10% to address site specific constraints and more suitable site design, subject to County review.
[2] k indicates thousand.
[3] Internal Neighborhood Roads and Pocket Park acreage located within Residential Single-Family land use acreage calculation.
[4] Park and Ride acreage located within Public Collector Roads.
[5] Minimum Requirement.

Exhibit 2-1a: Land Use Map

Exhibit 2-1b: Land Use Map Legend

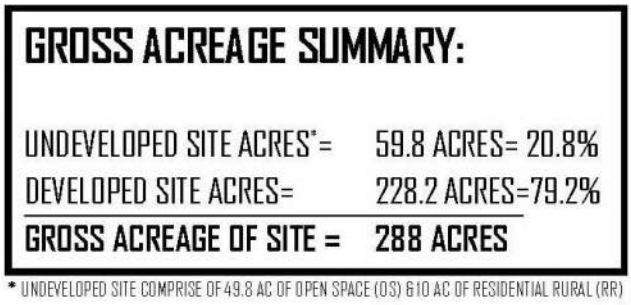
COLOR	LAND USE	ACRES	%
	RESIDENTIAL MULTI-FAMILY (DR-MF)	23.5	8.2%
	RESIDENTIAL SINGLE FAMILY- TRADITIONAL (DR-SF1)	132.6	46.0%
	RESIDENTIAL SINGLE FAMILY (DR-SF2)	16.9	5.9%
	RECREATION (DR-REC)	11.0	3.8%
	PRIMARY ROADS	21.9	7.6%
	RURAL RESIDENTIAL (RR) - EXISTING	10	3.5%
	RESIDENTIAL SUBTOTAL:	**215.9**	**75%**
	FLEX COMMERCIAL (DR-FC)	17.9	6.2%
	VILLAGE COMMERCIAL (DR-VC)	4.4	1.5%
	COMMERCIAL SUBTOTAL:	**22.3**	**7.7%**
	OPEN SPACE (DR-OS)	49.8	17.3%
	TOTAL:	**288**	**100%**

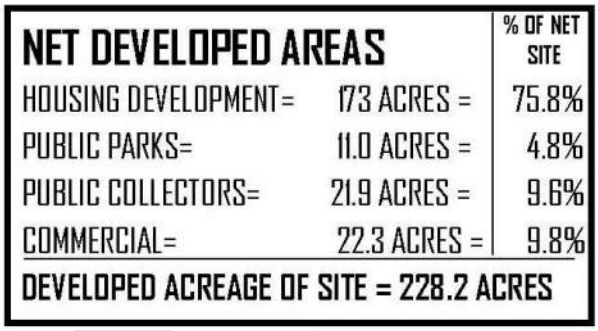
GROSS TOTAL ACREAGE OF SITE = 288 ACRES

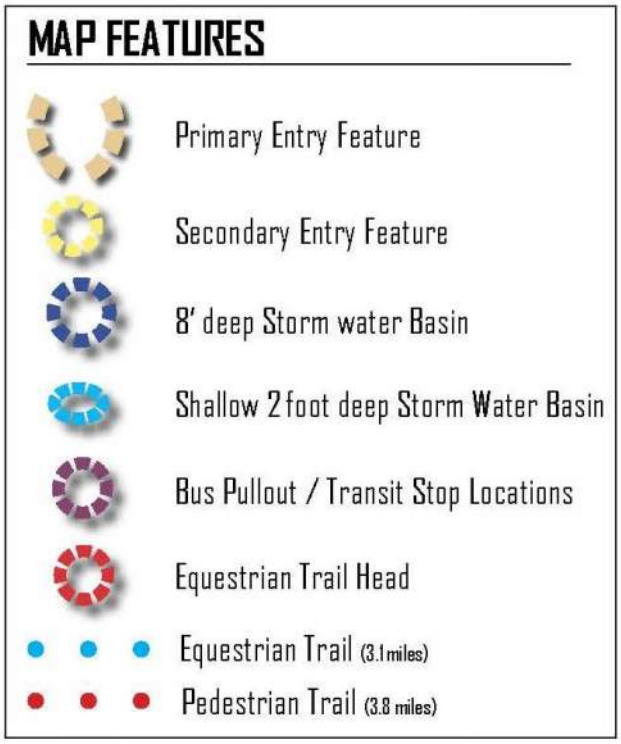
*** ALL STATISTICS ARE APPROXIMATE**

Exhibit 2-2a: Concept Master Plan

Exhibit 2-2b: Concept Master Plan Legends







HOUSING DEVELOPMENT NEIGHBORHOOD TOTALS ON GROSS SITE

LAND USE TOTALS

NBD	PRODUCT TYPE	LAND USE	LAND USE ACRES	% OF GROSS SITE	UNIT COUNT
1	MULTI-FAMILY	DR-MF	8.7	3.0%	173
2	MULTI-FAMILY	DR-MF	10.5	3.6%	210
3	CLUSTER	DR-SF2	16.9	5.9%	124
4	4,000,5000 SF LOT	DR-SF1	11.4	4.0%	72
5	4,000-5,000 SF LOT	DR-SF1	17.2	6.0%	104
6	4,000-5,000 SF LOT	DR-SF1	18.6	6.5%	114
7	4,500-8,700 SF LOT	DR-SF1	28.9	10.0%	157
8	5,000-8,600 SF LOT	DR-SF1	16.8	5.8%	62
9	4,500 SF - 10,000 SF LOT	DR-SF1	39.7	13.8%	198
SUBTOTAL	-		168.7	58.6%	1,214
10	AFFORDABLE (10% MIN. REQ'D.)	DR-MF	4.3	1.4%	75 MIN (72.04 REQ'D)
N/A	INTERNAL NEIGHBORHOOD ROADS[1]	-	-	-	-
N/A	POCKET PARKS (PARK)[1]	-	-	-	
N/A	PUBLIC RECREATION	DR-REC	11	3.8%	-
N/A	PRIMARY ROADS	-	21.9	7.6%	-
N/A	PARK AND RIDE[2]	-	-	-	-
N/A	RESIDENTIAL RURAL[3]	RR	10	3.5%	-
	TOTAL:	215.9		75%	1,289

** All land use, % of gross site, and unit counts shown above are approximate.*

[1] Internal Neighborhood Roads and Pocket Park acreage accounted for under Residential Neighborhood totals.

[2] Park and Ride acreage accounted for under Public Collector Roads.

[3] Residential Rural an existing land use and only included for the purposes of access and infrastructure.

COMMERCIAL TOTALS ON GROSS SITE

LAND USE TOTALS

	LAND USE	LAND USE ACRES	% OF GROSS SITE
FLEX COMMERCIAL	DR-FC	17.9	6.2%
VILLAGE COMMERCIAL	DR-VC	4.4	1.5%
TOTAL:	22.3		7.7%

OPEN SPACE ON GROSS SITE

LAND USE TOTALS

	LAND USE	LAND USE ACRES	% OF GROSS SITE
OPEN SPACE	DR-OS	49.8	17.3%
TOTAL:	49.8		17.3%

** All land use, % of gross site, and unit counts shown above are approximate.*

2.3 Residential Land Uses

2.3.1. *Residential Land Use Descriptions*

The DRSP contains a variety of residential land uses with varying density ranges. These include Residential Single-Family 1, Residential Single-Family 2, and Residential Multi-Family, as further described below.

Residential Single-Family 1 (DR-SF1)

Purpose

a. To provide for single-family homes on lots ranging from 4,000 sf to 10,000 sf that may be detached or attached and one- or two-stories.

b. To allow accessory uses that complement single-family neighborhoods.

c. To discourage incompatible non-residential uses in single-family neighborhoods.

Character

a. Areas with single-family dwellings at gross densities from four to seven dwelling units per acre.

b. Areas having appropriate level of services and located within an urban reserve line.

Residential Single-Family 2 (DR-SF2)

Purpose

a. To provide for single-family homes on lots ranging from 3,300 sf to 3,999 sf that may be detached or attached and one- or two-stories.

b. To allow accessory uses that complement single-family neighborhoods.

c. To discourage incompatible non-residential uses in single-family neighborhoods.

Character

a. Areas with single-family dwellings at gross densities from seven and a half to eight and a half dwelling units per acre.

b. Areas having appropriate level of services and located within an urban reserve line.

Residential Multi-Family (DR-MF)

Purpose

a. To provide areas for residential development multi-family development with a wide range of housing types that may be detached or attached and one-, two-, or three-stories.

b. To locate higher residential densities in close proximity to commercial areas and community services and facilities.

c. To relate allowed densities to adequate outdoor space supportive of private recreational activity.

Character

a. Areas with multiple-family dwellings at gross densities from eighteen to twenty-four dwelling units per acre.

b. Areas having appropriate level of services and located within an urban reserve line.

c. Areas close to neighborhood commercial, where infrastructure, circulation, and neighborhood facilities can accommodate multi-family residential development.

Exhibit 2-3: Residential Single-Family Concept

2.3.2. *Residential Land Use Goals, Objectives, and Policies*

The following overarching DRSP goals and objectives are brought forward from Chapter 1 of this document and associated policies are provided to guide the range and density of residential development envisioned within the DRSP area.

Goal 1

Provide a mix of land uses that recognizes the existing neighborhoods while providing a range of amenities accessible to residents and community members. To respect Old Town Nipomo, the small, neighborhood-oriented village commercial area has been designed to complement, rather than compete with this area.

Residential Policy 1.a

A variety of single-family and multi-family residential land uses shall be provided in varying configurations and densities.

Residential Policy 1.b

Single-family land uses shall be located within the DRSP area to transition from existing, surrounding Residential Suburban land uses.

Goal 3

Incorporate the rural history of the community through architectural design, as guided by Appendix A – Design Guidelines.

Residential Policy 3.a

Each residential neighborhood within the DRSP area should provide a unique aesthetic and design – including signage, consistent with the overarching vision for the DRSP area.

Residential Policy 3.b

While no specific architectural style is dictated herein, residential architecture character should be reflective of the rural history of the community, as outlined in Appendix A – Design Guidelines.

Goal 4

Provide a diversity of housing types and opportunities for home ownership and apartments, including affordable homes consistent with goals and policies of the Housing Element of the General Plan, the County's Inclusionary Housing Ordinance, and regional housing needs.

Residential Policy 4.a

A variety of for sale single-family and for sale/rental multi-family housing types shall be provided within the DRSP area to appeal to a broad range of customers.

Residential Policy 4.b

Affordable housing shall be constructed within the DRSP area consistent with the County Housing Element, Inclusionary Housing Ordinance, and requirements of the South County Area Plan to provide housing to meet the needs of area employees.

Residential Policy 4.c

Multi-family homes should have private open space features, such as balconies or patios, and have access to common outdoor areas on-site.

Residential Policy 4.d

All common outdoor areas (pocket parks, trails, and open space) within individual residential neighborhoods shall be privately maintained.

Goal 9

Meet the Building Code requirements for energy efficiencies and water savings.

Residential Policy 9.a

All residential development within the DRSP area shall meet the Building Code requirements for energy efficiencies and water savings at the time of development.

2.3.3. *Residential Development Standards*

Residential development standards ensure consistency with the overarching DRSP vision while guiding the implementation and review of housing development project proposals by the County.

Customized land use designations are provided to implement the land uses identified in Chapter 2. Land use designations included herein supersede the County's land use ordinance (Title 22) except where the DRSP is silent. In such cases, existing County land use category standards shall apply.

The development standards for Residential Single-Family and Residential Multi-Family are provided in Table 2.2 and Table 2.3 and are categorized based on land use type and density. It is assumed that these standards will be supplemented by additional covenants, conditions, and restrictions (CC&Rs), which will also be consistent with the DRSP. To guide potential development of Accessory Dwelling Units within the DRSP, Table 2.4 has been provided to outline relevant development standards.

Applicants should refer to Appendix A for applicable design direction for residential site planning, architecture, and landscaping.

Table 2.2: Residential Single-Family Development Standards

	DR-SF1	*DR-SF2*
Minimum Setbacks		
Front	16 ft	10 ft
Side	5 ft	0 - 5 ft
Street	10 ft	10 ft
Rear	12 ft	5 ft
Garage	20 ft from back of sidewalk	5 ft from motorcourt
Maximum Porch Encroachment		
	6 ft	N/A
Maximum Lot Coverage[1]		
	NBD 4-7 = 55% NBD 8-9 = 60%	65%
Maximum Height[2]		
	30 ft, 2-stories; refer to Special Height Restrictions for NBDs 7, 8, and 9 below	35 ft, 2- stories
Special Height Restrictions		
Neighborhoods 7, 8, and 9	Lots directly adjacent to Hetrick Ave. and Sandydale Dr. are limited to 22 ft, 1-story in height.	-
Typical Lot Size		
	4,000 sf – 10,000 sf	3,300 sf - 3,999 sf

	DR-SF1	*DR-SF2*
Pocket Park Space[3]		
NBD 3		1.5 – 2.0 ac
NBD 4	0.7 – 0.9 ac	
NBD 5	1.1 – 1.5 ac	
NBD 6	0.7 – 1.0 ac	
NBD 7	2.1 – 3.0 ac	
NBD 8	0.6 – 1.1 ac	
NBD 9	1.8 – 2.5 ac	
Pocket Park Total	8.5 - 12	
Minimum Private Open Space		
	300 sf rear yard w/ 12 ft min. depth	300 sf side or rear yard w/ 10 ft min. depth
Parking		
	2 enclosed off-street parking spaces per home	2 enclosed off-street parking spaces per home; plus 1 guest space per 5 homes

Notes:

[1] Accessory Dwelling Units are allowable and do not count towards lot coverage.

[2] A building may exceed the height indicated if it has a pitched roof with a slope greater than 2.5/ 12, and the additional height above the maximum allowed is used to achieve this pitched roof.

[3] Sizes shown are approximate and may vary.

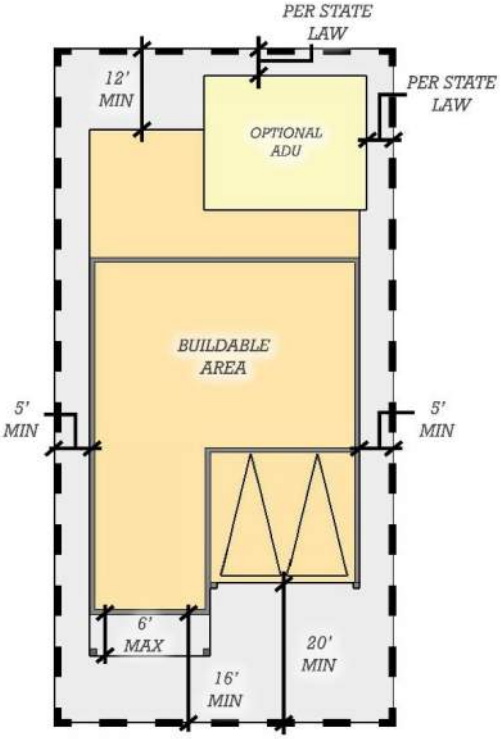


Exhibit 2-4: DR-SF1 Standards

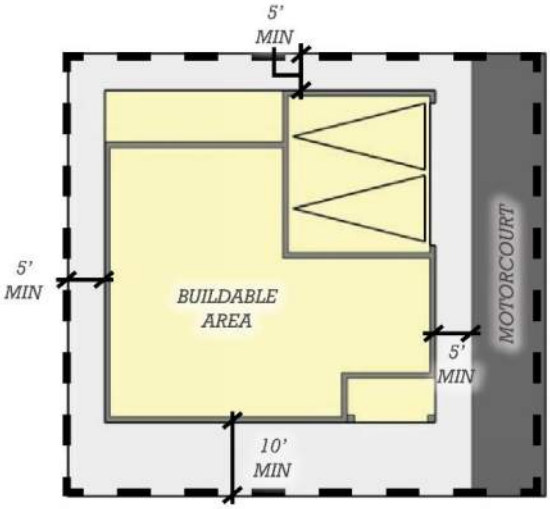


Exhibit 2-5: DR-SF2 Standards

Table 2.3: Residential Multi-Family Development Standards

	DR-MF
Minimum Setbacks	
Front	10 ft
Side	5 ft
Street	10 ft
Rear	10 ft
Garage/Carport	20 ft from back of sidewalk
Minimum Building Separation	
Principal Building	10 ft
Between Facing Garages	28 ft
Porch Encroachment	
	3 ft
Allowable Density	
	18-24 du/ac[1,2]
Maximum Lot Coverage[5]	
	70% (net)
Maximum Height[3]	
	45 ft, 4-stories[4]
Minimum Lot Size	
	N/A
Minimum Common Open Space	
	30% net site area
Minimum Private Open Space	
	80 sf per home (may include patios, decks, balconies, or porches)
Parking	
	1 sp./studio or 1 bdrm.; 1.5 sp./2-bdrm.; 2.0 sp./3+ bdrm. 1 guest sp. per 5 homes.

Notes:

[1] Allowable dwellings for DR-MF land use based on units per gross acre.

[2] Excludes density bonuses

[3] A building may exceed the height indicated if it has a pitched roof with a slope greater than 2.5/12, and the additional height above the maximum allowed is used to achieve this pitched roof.

[4] 33-ft to the top of plate, 45-ft to the roof.

[5] Accessory Dwelling Units are allowable and do not count towards lot coverage.

Table 2.4: Accessory Dwelling Unit Development Standards

	Attached	*Detached*
Minimum Setbacks		
Front	Shall comply with the requirements applicable to the attached single-family dwelling.	n/a
Side	Per state law.	
Rear	Per state law.	
Maximum Size	Per state law.	
Maximum Height	Per state law.	
Parking		
	Per state law.	

2.3.4. *Residential Allowable Uses*

Table 2.5 below outlines the allowable land uses for the Residential Single-Family and Multi-Family land uses within the DRSP area. As indicated in the table, primary uses are those that are a primary use within the residential land uses, while secondary uses are those that are subordinate to or in support of a primary use.

To review applicable permit types and processes referenced in Table 2.5, refer to Chapter 7 – Implementation and Administration.

Table 2.5: Residential Use Table

	DR-SF1	*DR-SF2*	*DR-MF*
Primary Uses			
Single-Family Dwellings	ZC	ZC	N
Multi-Family Dwellings	N	N	ZC
Secondary Uses			
Accessory Dwelling Unit (Secondary Dwelling) [1]	ZC	ZC	ZC
Child Day Care – Family Day Care Homes	P	P	P
Community Center/Clubhouse/Pool	ZC	ZC	ZC
Community Garden	ZC	ZC	ZC
Detached Garage	ZC	N	N
Home Occupation	ZC	ZC	ZC
Pocket Park	ZC	ZC	ZC
Residential Accessory Uses	ZC	ZC	ZC
Residential Care Home, 6 or fewer boarders	ZC	ZC	ZC
Residential Care Home, 7 or more boarders	N	N	MUP

Notes:
ZC: Zoning Clearance SP: Site Plan MUP: Minor Use Permit N: Not Permitted
Uses listed above consistent with County use definitions, where applicable.
[1] Governed by applicable State law.

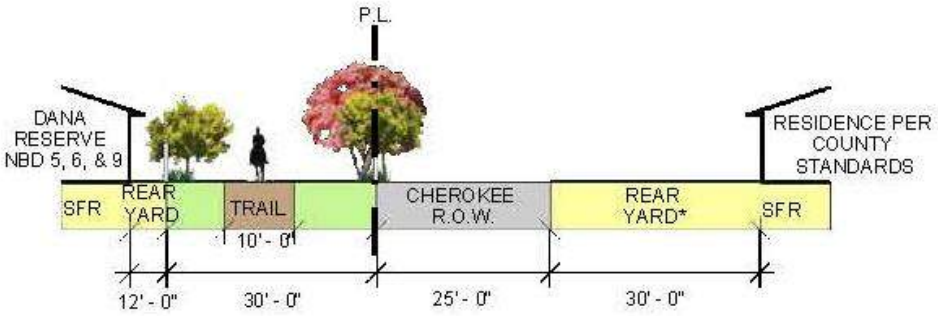
2.3.5. *Edge Condition Development Standards*

With the property being located in between existing residential development to the north, south, and west, layout of the DRSP has been conducted to allow for additional buffering of these existing residential areas, as described further below. It should be noted that the referenced building to building setbacks shown below are minimums when considering existing building locations on properties adjacent to the DRSP.

Northern DRSP Property Line

For Neighborhood's 5, 6, and 9, edge conditions along the northern property line will result in a minimum separation between buildings of 97 feet (Exhibit 2-6). Beginning in Neighborhood 5 and 6 on the DRSP property, this includes a minimum 12-foot rear yard setback, 30-foot equestrian trail, 25-foot Cherokee Place, and a minimum 30-foot rear yard setback for the existing Residential Rural lots north of Cherokee Place.

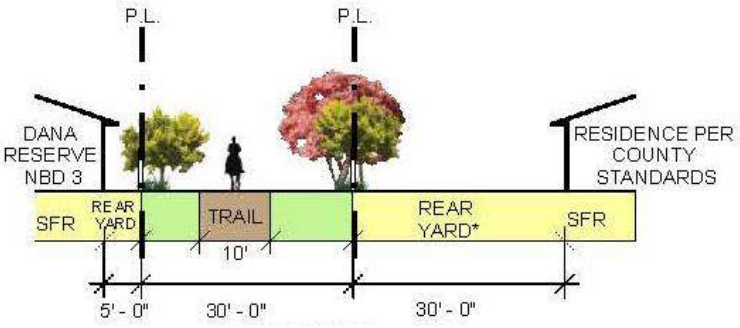
Exhibit 2-6: Northern DRSP Property Line Edge Condition at Neighborhoods 5, 6, and 9



Southern DRSP Property Line

For Neighborhood 3, edge conditions along the southern property line will result in a minimum separation between buildings of 65 feet (Exhibit 2-7). Beginning in Neighborhood 3 on the DRSP property, this includes a minimum 5-foot rear yard setback, 30-foot equestrian trail, and a minimum 30-foot rear yard setback for the existing Residential Suburban lots fronting onto Sandydale Drive.

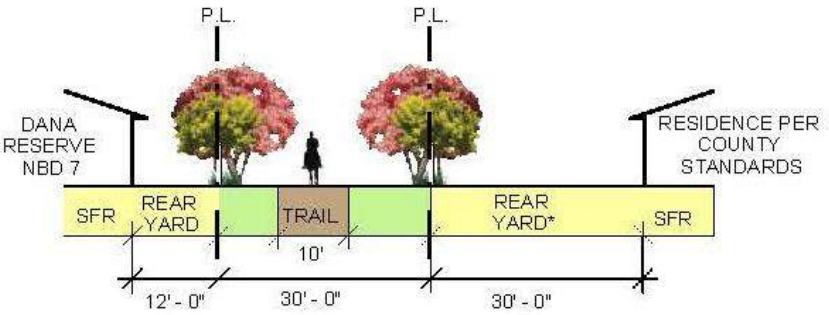
Exhibit 2-7: Southern DRSP Property Line Edge Condition at Neighborhood 3



For Neighborhood 7, edge conditions along the southern property line will result in a minimum separation between buildings of 72 feet (Exhibit 2-8). Beginning in Neighborhood 7 on the DRSP

property, this includes a minimum 12-foot rear yard setback, 30-foot equestrian trail, and a minimum 30-foot rear yard setback for the existing Residential Suburban lots fronting onto Sandydale Drive. Homes in Neighborhood 7 immediately adjacent to the southern DRSP property line will be one-story.

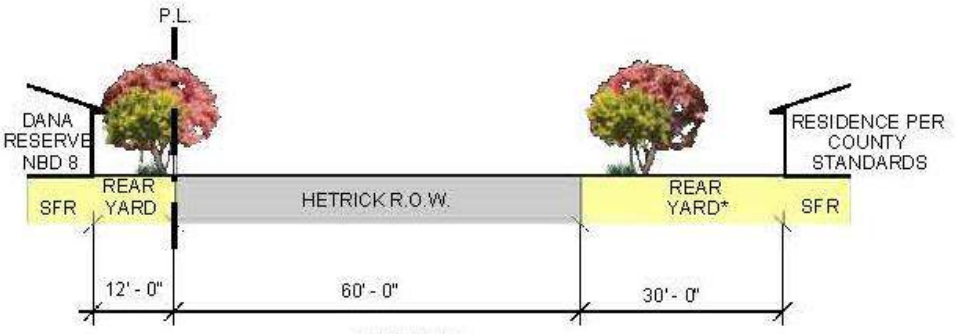
Exhibit 2-8: Southern DRSP Property Line Edge Condition at Neighborhood 7



Western DRSP Property Line

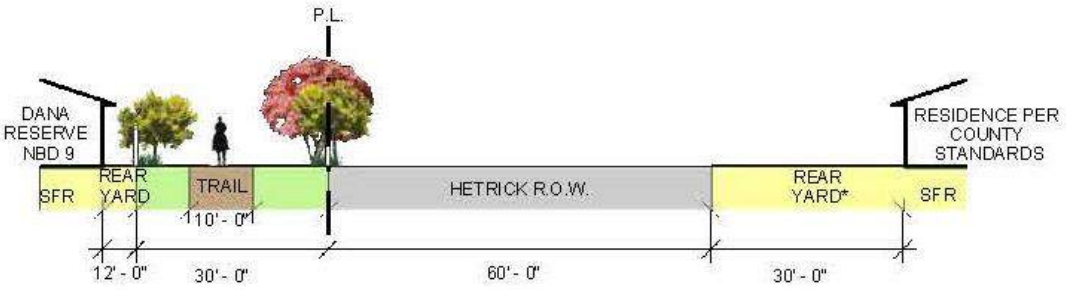
For Neighborhood 8, edge conditions along the western property line will result in a minimum separation between buildings of 102 feet (Exhibit 2-9). Beginning in Neighborhood 8 on the DRSP property, this includes a minimum 12-foot rear yard setback, 60-foot Hetrick Avenue right-of-way, and a minimum 30-foot side/rear yard setback for the existing Residential Suburban lots fronting onto Pomeroy Road or Calimex Place. Homes in Neighborhood 8 immediately adjacent to the western DRSP property line will be one-story.

Exhibit 2-9: Western DRSP Property Line Edge Condition at Neighborhood 8



For Neighborhood 9, edge conditions along the western property line will result in a minimum separation between buildings of 132 feet (Exhibit 2-10). Beginning in Neighborhood 9 on the DRSP property, this includes a minimum 12-foot rear yard setback, 30-foot equestrian trail, 60-foot Hetrick Avenue right-of-way, and a minimum 30-foot side yard setback for the existing Residential Suburban lots siding onto Hetrick Avenue. Homes in Neighborhood 9 immediately adjacent to the western DRSP property line will be one-story.

Exhibit 2-10: Western DRSP Property Line Edge Condition at Neighborhood 9



2.3.6. *Architectural Design Guidance*

As noted above, no specific architectural style is required for the DRSP. However, in order to implement the vision and character of the DRSP outlined in Chapter 1, design guidelines have been provided in Appendix A that will guide the design of future projects as they are submitted. Applicants should refer to Appendix A for applicable design direction for residential site planning, architecture, and landscaping.

2.3.7. *Residential Fencing Standards*

Table 2.6: Residential Fencing Standards below outline fencing standards which apply to all residentially designated land uses within the DRSP. This includes fencing standards related to location, height, type and materials, as well as prohibited styles. In general, the intent of the residential fencing standards is to allow for individual properties to take advantage of adjacencies to park and open spaces on-site while providing privacy for future homeowners. All fences to be provided by the developer and maintained by the Homeowners Association. Refer to Appendix A – Design Guidelines for recommended locations for residential fencing.

Table 2.6: Residential Fencing Standards

Location
A. Fencing is permitted along the front, side, and rear property lines. Fencing within the required street setback area is prohibited. B. Property line fencing at the side or street yards connecting to the primary residence shall be setback a minimum of 5-feet from the primary street facing facade. C. Where a Residential Multi-Family designated property is located adjacent to a Flex Commercial designated property, fencing is required on the Residential Multi-Family property only.
Height
A. Front – Forty-Two (42) inches maximum. B. Side and Rear Yard – Six (6) feet minimum/maximum.

2.3.8. *Affordable Housing*

As discussed below, the County's Housing Element (2020-2028) and Inclusionary Housing Ordinance (Section 22.12.080) outline the goals, objectives, policies, and implementation programs to provide for a variety of housing types at various affordability levels across the County. It is the goal of the DRSP to provide for a diversity of housing types and opportunities for home ownership and apartments, with priority given to those who live and work in southern San Luis Obispo County. For more specific housing related policies, refer to Section 2.3.2 above.

General Plan Housing Element

The County's current Housing Element (2020-2028) is intended to facilitate the provision of needed housing in the context of the General Plan Land Use Element and related ordinance. It is also intended to meet the requirements of State law. It contains a number of relevant goals, objectives, policies, and implementation programs to ensure the County meets its goals of meeting the housing needs while remaining consistent with State law.

The overall goal of the County Housing Element is to:

"Achieve an adequate supply of safe and decent housing that is affordable to all residents of the unincorporated county."

Relevant primary objectives and associated policies include:

"Objective HE 1.00 – Facilitate the development and preservation of housing units that are diverse in type, size, and ownership level to meet the needs of residents of varying lifestyles and income levels."

Policy HE 1.01 - Support and prioritize new residential development in areas identified for strategic regional residential development and other areas that are (a) located along priority transportation corridors (i.e. highways identified by San Luis Obispo Council of Governments as priorities for regional infrastructure investments), (b) located in or between areas with higher concentration of jobs and services, and (c) located within or in close proximity to existing urbanized areas or communities. This includes, but is not limited to, supporting and prioritizing the following in such areas:

- *improvements to infrastructure and facilities;*
- *reductions in infrastructure constraints for the development of housing to the extent possible; and*
- *increases in the supply of land for residential uses.*

Policy HE 1.02 - Prioritize proximity to jobs, services, schools, parks, and transportation systems when designating land for housing.

Policy HE 1.04 - Encourage proposed residential developments to provide safe and attractive living environments through incorporation of high-quality architectural design, materials, site planning, and site amenities.

To ensure the County meets this objective and associated policies during the current Housing Element term and to position the County to meet future, longer-term housing needs, the following implementation program is identified:

"Program C: Designation of additional land for residential uses."

Land Use Ordinance Inclusionary Housing

Section 22.12.080 of the County LUO contains policies and procedures related to inclusionary housing that is a requirement as part of development projects. Development containing two or more residential dwelling units, commercial/industrial uses with a cumulative floor area of 5,000 square feet or more, mixed-use development, and subdivision of land are subject to these requirements.

As of 2021, Land Use Ordinance Section 22.12.040.C. - Inclusionary housing requirements for new development – development projects are required to designate a minimum of 8% of the base density as inclusionary housing. This 8% inclusionary housing mix is broken down by 2% increments between Workforce, Moderate income, Low income, and Very Low-income households. As noted in Section 22.12.080.G.2, the County provides for a reduction in required inclusionary housing by 25% for those units constructed on-site.

Requirements for inclusionary housing for residential dwelling units are based upon the base density of a project. Base density is the maximum number of residential units that may be allowed, not including any density bonuses. Commercial and industrial development of 5,000 square feet or more of floor area for commercial or industrial use also requires the payment of a housing impact fee or construction of inclusionary housing units.

Specific Plan Application

The DRSP will implement the goals and polices of the County Housing Element and Inclusionary Housing Ordinance by donating land to a local non-profit(s) to allow for construction of these affordable homes on-site to meet or exceed the County's Inclusionary Housing requirements. As shown on Exhibit 2-2a, Neighborhood 10 has been appropriately sized and located to accommodate these affordable homes on-site and will provide for a minimum of 75 units.

In addition to Neighborhood 10, land will also be donated to a local non-profit at APN 091-301-030 to allow for a self-help ownership program. APN 091-301-030 is not a part of the DRSP proposal but will provide for a minimum of ten (10) units, which will be required to be completed under a separate application process from the DRSP effort.

Local Preference Program

As part of the DRSP, a local preference program for housing will be included. The local preference program will give first priority to individuals who live or work in the southern portion of San Luis Obispo County.

2.4 Commercial Land Uses

2.4.1 Commercial Land Uses

The DRSP contains a variety of commercial land uses with varying density ranges. These include Village Commercial and Flex Commercial, as further described below.

Village Commercial (DR-VC)

Purpose

a. To provide convenient locations for retail commercial and service establishments to meet daily shopping needs of residents and visitors.

b. To provide opportunities for community gathering and meeting spaces.

Character

a. Focused areas where small-scale neighborhood commercial, services, and community uses can be allowed to provide day-to-day shopping needs for adjacent residential neighborhoods.

b. Locations adjacent to residential areas along collector or arterial streets which will reduce the number of shipping trips for daily needs and to encourage walking or bicycling.

c. Areas having appropriate level of services and located within an urban reserve line.

Flex Commercial (DR-FC)

Purpose

a. To provide areas for commercial, office, and light manufacturing to support local job generating businesses.

b. To provide limited areas for highway traveler services and uses associated with tourists and vacationers within urban areas on collectors.

c. To provide areas for development of public facilities and/or educational facilities to meet the public needs.

Character

a. Areas characterized by commercial, service, and small-scale industrial uses.

b. Areas where uses serve both occasional needs and day-to-day needs.

c. Areas that serve resident, transient, and tourist needs.

d. Areas that satisfy the specialized site location requirements of public agencies and/or educational facilities, where facilities will be visible and accessible to their users.

e. Areas having appropriate level of services and located within an urban reserve line.

Exhibit 2-11: Village Commercial Neighborhood Barn Concept

Exhibit 2-12: Village Commercial Site Plan Concept

2.4.2 *Commercial Land Use Goals, Objectives, and Policies*

The following overarching DRSP goals and objectives brought forward from Chapter 1 of this document and associated policies are provided to guide the range of commercial development envisioned within the DRSP area.

Goal 1

Provide a mix of land uses that provides a range of amenities accessible to residents and community members. To respect Old Town Nipomo, the small, neighborhood-oriented village commercial area has been designed to be limited in size, rather than compete with this area.

Commercial Policy 1.a

A range of commercial, office, hospitality, and education space shall be provided within the commercial areas of the DRSP to provide flexibility of future uses.

Commercial Policy 1.b

The Village Commercial Center shall include a variety of neighborhood serving uses that accommodate the day-to-day needs of the neighborhood. This may include a neighborhood barn, an event venue to accommodate neighborhood or community events.

Commercial Policy 1.c

Outdoor seating and pedestrian amenities should be provided in conjunction with commercial land uses for residents, visitors, and employees.

Goal 3

Incorporate the rural history of the community through architectural design, as guided by Appendix A – Design Guidelines.

Commercial Policy 3.a

While no specific architectural style is dictated, commercial architecture character should be reflective of the rural history of the community, as outlined in Appendix A – Design Guidelines

Goal 5

Create new employment and job training opportunities for the community and the broader South San Luis Obispo County area.

Commercial Policy 5.a

The Flex and Village Commercial land use designation shall provide a variety of tenant space configurations to accommodate a range of business types and sizes for new employment opportunities and may also include an educational campus to provide ongoing job training and life-long learning opportunities.

Goal 9

Meet the Building Code requirements for energy efficiencies and water savings.

Commercial Policy 9.a

All commercial development within the DRSP shall meet the minimum County Building Code requirements for energy efficiencies and water savings.

2.4.3 *Commercial Development Standards*

Commercial development standards apply to the Village Commercial (DR-VC) and Flex Commercial (DR-FC) land uses within the DRSP and are intended to ensure consistency with the DRSP vision while guiding the implementation and review of individual development proposals by the County.

Customized land use designations are provided to implement the land uses identified in Chapter 2. Land use designations included herein supersede the County's land use ordinance (Title 22) except where the DRSP is silent. In such cases, the existing County land use category standards shall apply.

The commercial development standards for Village Commercial and Flex Commercial land uses are provided in Table 2.7 below.

Applicants should refer to Appendix A for applicable design direction for commercial site planning, architecture, and landscaping.

Table 2.7: Commercial Development Standards

	DR-VC	*DR-FC*
Minimum Building Setbacks		
Front	0-ft	10-ft
Interior Side	0-ft	0-ft
Street	0-ft	10-ft
Rear	Per Building Code Requirements, except: 15' – adj. to RES. use.	20-ft
Minimum Lot Size		
	No minimum	0.5 ac
Maximum Lot Coverage		
	100%	70%
Maximum Floor Area Ratio		
	1.5; 2.5 for lodging or school uses	1.5; 2.5 for lodging or school uses
Maximum Height		
	35-ft, 2-stories; 50-ft, 4-stories for lodging or schools uses	35-ft, 2-stories; 50-ft, 4-stories for lodging or school uses
Minimum Private/Common Area Landscaping		
	5% of parking area	10%
Landscape Buffer		
	-	10-ft along Highway 101
Minimum Parking Requirements [1, 2]		
	Restaurants & Bars – 1/200 sf *Commercial/Retail* - 1 sp/250 sf	*Restaurant & Bars* – 1/200 sf *Commercial/Retail* - 1 sp/250 sf

	DR-VC	*DR-FC*
	Lodging - 1 sp/room + 5% of total *Schools (Colleges/University)* - 1 sp/3.4 students *Daycare* - 1 sp/1 staff member plus 1 sp for each 5 children *Office* – 1/300 sf	*Commercial Service* – 1 sp/250 sf *Schools (Pre-Schools to Secondary)* - 1 sp/staff member plus 1 space per 5 children *Schools (Colleges/University)* – 1 sp/3.4 students *Lodging* - 1 sp/room + 5% of total *Small Scale Manufacturing* – 1 sp/500 *Office* – 1/300 sf *Medical Office* - 1/200 sf
Notes: [1] Where two or more nonresidential uses are located on a single property, the number of parking spaces may be reduced at a rate of 5% for each nonresidential use, up to a maximum of 20%. [2] Minimum parking requirements shall be calculated based on the net floor area in both Village and Flex Commercial areas of useable space within a building. However, parking requirement calculations shall not include storage areas or mechanical space.		

2.4.4 Commercial Allowable Uses

Table 2.8 below outlines the allowable land uses for the Village Commercial and Flex Commercial/Light Industrial land uses within the DRSP area.

To review applicable permit types and processes referenced in Table 2.8, refer to Chapter 7 – Implementation and Administration. Other uses not listed below may be approved by the Director of Planning and Building that are consistent with the intent of the DRSP and will not result in increased impacts through a minor use permit.

Table 2.8: Commercial Use Table

	DR-VC	*DR-FC*
Animal Hospitals and Veterinary Medical Facilities	N	ZC
Automobile, Mobile Home & Vehicular Dealers	N	N
Automobile Service Stations/Gas Stations	N	N
Building Materials and Hardware	N	ZC
Child Day Care Centers	ZC	ZC
Drive-In and Drive-Thru Services	N	SP
Food and Beverage Products	N	ZC
Furniture & Fixture Products, Cabinet Shops	N	ZC
General Retail	ZC	ZC

	DR-VC	*DR-FC*
Health Care Services	N	ZC
Health/Fitness Club	SP	SP
Heavy Manufacturing	N	N
Lodging – Hotels & Motels, 40 or more units	SP	SP
Neighborhood Market (<10,000 sf)	ZC	ZC
Neighborhood Market (<50,000 sf)	N	SP
Personal Services	ZC	ZC
Public Assembly and Entertainment Facilities	SP	SP
Offices	ZC	ZC
Residential[1]	MUP	MUP
Restaurant and Bars (including breweries, wine tasting, and distilleries)	SP	MUP
Schools – College and University	SP	SP
Schools – Preschool to Secondary	SP	SP
Small Scale Manufacturing	N	SP
Warehousing	N	N
Notes: ZC: Zoning Clearance SP: Site Plan MUP: Minor Use Permit N: Not Permitted Per County use definitions, where applicable. [1] Governed by applicable State law.		

2.4.5 *Architectural Design Guidance*

As noted above, no specific architectural style is required for the DRSP. However, in order to implement the vision and character of the DRSP outlined in Chapter 1, design guidelines have been provided in Appendix A that will guide the design of future projects as they are submitted. Applicants should refer to Appendix A for applicable design direction for commercial site planning, architecture, and landscaping.

2.4.6 *Commercial Fencing Standards*

Table 2.9: Commercial Fencing Standards below outlines the fencing standards which apply to all commercially designated land uses within the DRSP. This includes fencing standards related to location, height, type and materials, as well as prohibited styles. Refer to Appendix A – Design Guidelines for recommended locations for commercial fencing.

Table 2.9: Commercial Fencing Standards

Location
A. Fencing is permitted along the side and rear yard property lines. Fencing within the front setback areas is prohibited. B. No fencing is required adjacent to U.S. Highway 101, other than required by Caltrans. C. Where a Residential Multi-Family designated property is located adjacent to a Flex Commercial designated property, fencing is only required on the Flex Commercial property.
Height
A. Side and Rear Yard – Six (6) feet minimum/maximum. B. Recreation or Open Space – No fencing required.

2.5 Recreation and Open Space Land Uses

2.5.1 Recreation and Open Space Land Use Descriptions

The DRSP contains a variety of recreation and open space land uses. These include Recreation (DR-REC) and Open Space (DR-OS), as further described below.

Recreation (DR-REC)

Purpose

a. To identify areas having recreational potential where private or public development of recreational uses can be encouraged.

b. To provide for public park and recreation areas to serve neighborhood and community residents and visitors.

Character

a. Areas of existing or proposed recreational uses that emphasize and retain a recreational resource on a portion of a property.

b. Areas with natural or man-made recreational resource that will serve particular public recreational needs.

Open Space (DR-OS)

Purpose

a. To identify lands having value as natural areas.

b. To identify lands that are capable of supporting passive recreational activities.

Character

a. Portions of a site with natural features such as unique topography or vegetation.

b. Areas for passive, non-intensive recreational sues such as picnic areas and hiking trails.

Exhibit 2-13: Public Neighborhood Park Concept

2.5.2 *Recreation and Open Space Land Use Goals, Objectives, and Policies*

The following DRSP goals and objectives brought forward from Chapter 1 of this document and associated policies are provided to guide the recreation and open space land use categories envisioned within the DRSP area. For additional goals and policies related to Recreation and Open Space, refer to Chapter 3.

Goal 1

Provide a mix of land uses that recognizes the existing neighborhoods while providing a range of amenities accessible to residents and community members. To respect Old Town Nipomo, the small, neighborhood-oriented village commercial area has been designed to complement, rather than compete with this area.

Recreation and Open Space Policy 1.a

Recreation and Open Space land uses shall be distributed throughout the DRSP area to provide access to both residents and the community.

Recreation and Open Space Policy 1.b

Recreation and Open Space land uses should be utilized to provide a buffer between the DRSP area and the surrounding neighborhoods to the extent practical.

Recreation and Open Space Policy 1.c

Open space land uses shall serve a variety of functions including but not limited to recreation, trails, stormwater management, and habitat conservation.

2.5.3 *Recreation and Open Space Standards*

Recreation and open space standards apply to the Recreation (REC) and Open Space (OS) land uses within DRSP. They are intended to ensure consistency with the DRSP vision while guiding the long-term implementation and review of individual proposals by the County.

Customized land use designations are provided to implement the land uses identified in Chapter 2. Land use designations included herein supersede the County's land use ordinance (Title 22) except where the DRSP is silent. In such cases, the existing County land use category standards shall apply.

For additional standards related to Recreation and Open Space land uses, refer to Chapter 3.

Table 2.10: Recreation and Open Space Development Standards

	DR-REC[1]	*DR-OS*
Minimum Parking Requirements [1]		
	Daycare - 1 sp/1 staff member plus 1 sp for each 5 children	-
[1] Minimum parking requirements shall be calculated based on the net floor area in Recreation area of useable space within a building. However, parking requirement calculations shall not include storage areas or mechanical space.		

2.5.4 *Recreation and Open Space Allowable Uses*

Table 2.11 below outlines the allowable land uses for the Recreation and Open Space land uses within the DRSP area.

Table 2.11: Recreation and Open Space Use Table

	DR-REC	*DR-OS*
Primary Uses		
Equestrian Facilities (trails and trailhead)	ZC	ZC
Public Neighborhood Park	ZC	N
Outdoor Athletic Facilities	ZC	N
Pedestrian Trails	ZC	ZC[1]
Public Parks and Playgrounds	ZC	N
Child Day Care Centers	ZC	N
Secondary Uses		
Mobile Homes	N	N
Public Utility Facilities (Basins, Pumphouses)	SP	SP
Outdoor Sports and Recreational Facilities - Private	SP	N
Outdoor Sports and Recreational Facilities - Public	SP	N
Storage – Accessory	MUP	MUP
Temporary Events[2] • Farmer's Market • Private Parties • Non-Profit Events • Movie Nights	SP	SP

	DR-REC	*DR-OS*
Notes: ZC: Zoning Clearance SP: Site Plan MUP: Minor Use Permit N: Not Permitted Per County use definitions, where applicable. [1]Pedestrian trails in the Open Space Land Uses shall be unpaved. [2]Temporary Events are subject to the Site Design Standard requirements outlined in Title 22, Section 22.30.610 of the County LUO.		

2.5.5 Recreation and Open Space Fencing Standards

Table 2.12: Recreation and Open Space Fencing Standards below outlines the fencing standards which apply to all recreation and open space designated land uses within the DRSP. This includes fencing standards related to location, height, type and materials, as well as prohibited styles. Refer to Appendix A – Design Guidelines for recommended locations for recreation and open space fencing.

Table 2.12: Recreation and Open Space Fencing Standards

Location
A. Not required along streets or trails, unless an equestrian trail is located adjacent to a street, in which case a 4-foot high, split rail fence is required.
Height
A. Adjacent to Streets, Parks, and Open Space - Four (4) feet maximum. B. Adjacent to Detention Basin - Per County requirements.

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3 Conservation, Open Space, and Recreation

3.1 Introduction

This Chapter discusses the extent and location of open space, cultural resources, and recreational spaces within the Dana Reserve (DRSP) area. It also includes goals and policies for ensuring the long-term success and management of these resources and assets. The open space, trail network, and recreational amenities are envisioned as a cornerstone for the DRSP. These open space areas will provide moments to embrace tranquility and peacefulness, while recreation spaces will encourage exercise, exploration, play, and community engagement – part of the larger healthy community vision for the DRSP. Refer to Table 3.1 below for a summary of land use acreages of these areas within the DRSP and Exhibit 3-1 for their locations.

Table 3.1: Recreation and Open Space Land Use Summary

Land Use	*Acreage (ac)*	*% of Site (%)*
Open Space ○ Open Space ○ Trails ○ Basins	49.8[1]	17.3
Recreation	11[1]	3.8
Pocket Parks	8.5 - 12	3.0 – 4.2
Totals	*67.3 – 72.8*	*23.4 – 25.3*

[1] *Minimum Requirement.*

Exhibit 3-1: Open Space and Recreation Map

3.2 Conservation and Open Space

The proposed DRSP Open Space includes a total of 49.8 acres (17.3%) of the total site. This designation includes areas that remain undeveloped long-term, as well as areas that provide opportunities for passive uses. Examples of areas intended to remain undisturbed long-term include the central oak woodland area, while passive open space areas will include pedestrian and equestrian trails as well as seating areas. County trail standards for pedestrian and equestrian trails are specified in Chapter 4: Circulation.

A Biological Report was conducted for the DRSP in 2020, with updates completed in 2021 related to oak trees and Burton Mesa Chaparral. The report identified eight special status plant species located within the DRSP area. Additional special plant and habitat surveys were also conducted in 2018 and 2019. The data collected from these biological studies served as a general guide to the siting of land uses within the DRSP area in order to avoid or minimize impacts to these species.

Open space area concepts.

3.2.1 Biological

Coast Live Oaks

The DRSP contains coast live oak trees dispersed in different locations across the site. With the exception of three non-native trees, no other tree species are located on the property. While many of the coast live oaks are scattered in various configurations, most intact oak woodland (oak forest) is located centrally on the property with a denser tree coverage, canopy structure, and understory shrub cover than other areas of the site. Most of the oaks in savannah, chaparral, and managed oak woodland on the Dana Reserve resprouted from oaks harvested in the late 1800's to increase grazing area. The Dana family had 18,000 head of sheep in the area in the 1890's. The understory of multi-stemmed trees continues to be managed for grazing. The managed woodland has been grazed by horses and cattle in recent decades. Low tree branches and dead wood are removed to increase grass cover and reduce fire fuel.

The majority of the centrally located oak woodland, not historically managed, is to be maintained as part of the DRSP. To maintain the integrity of this centrally located oak woodland, development and the circulation network has been located to minimize impacts. Where development is to occur

adjacent to areas where coast live oaks are to be maintained, County oak tree protection construction best practices will be implemented.

An Oak Woodland Management Plan, Tree Protection Plan, Off-Site Habitat Acquisition and Preservation Plan, and On- and Off-Site Habitat Mitigation and Monitoring Plan will be prepared. A combination of on-site mitigation plus off-site conservation will be used to offset the loss of coast live oaks. On-site mitigation will be implemented for the 30 individual oaks removed from grassland habitats at a 4:1 ratio to mitigate for temporal loss. Planting locations will be selected adjacent to existing coast live oak areas to be maintained, within open spaces, recreation and park areas, or street trees within select areas. To the extent practical, on-site mitigation of coast live oak trees will be propagated from on-site acorns. Plantings shall not fulfill more than one-half of the mitigation requirements. Off-site mitigation for loss of oak woodland habitat will be provided by oak woodland habitat acquisition and conservation at a 2:1 ratio (two acres conserved for every acre of oak woodland habitat impacted).

Special Status Plant Species

As part of the 2020 Biological Report and subsequent 2021 updates related to oaks and Burton Mesa Chaparral conducted for the DRSP effort, eight special status plant species were identified within the DRSP area. These include Sand mesa manzanita (*Arctostaphylos rudis*), Sand buck brush (*Ceanothus cuneatus var. fascicularis*), Michael's rein orchid (*Piperia michaelii*), Mesa horkelia (*Horkelia cuneata*), California spineflower (*Mucronea californica*), Nipomo mesa ceanothus (*Ceanothus impressus var. nipomoensis*), and Sand almond (*Prunus fasciculata var. punctata*). Based on the extent of the DRSP development area, the 2020 Biological Report and subsequent 2021 updates found potential for adverse effects, however it noted that effects to all special status plan species can be mitigated.

The DRSP will avoid impacts to special status plant species to the extent practical. For those special status species that cannot be avoided, appropriate mitigation ratios will be required.

Listed Plant Species

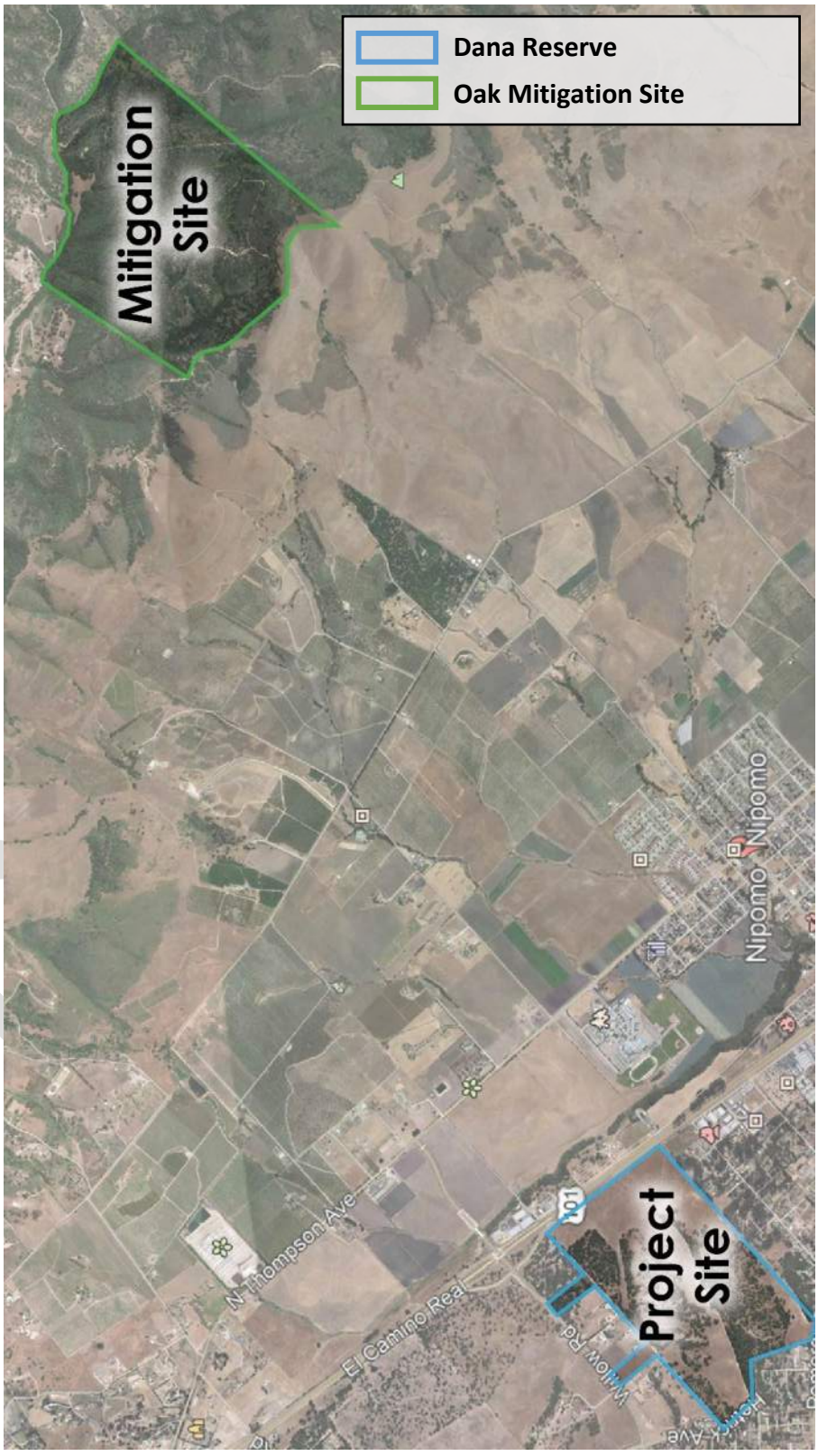
During surveys and field observations on the property for the 2020 Biological Report, small patches of a state listed plant species, Pismo clarkia (*Clarkia speciosa ssp. Immaculata*) were identified in portions of the centrally located oak woodland area. Development, including roadways, have been situated on-site to avoid impacts to these areas, however a small impact to state-listed species may occur. Relevant state permits will be obtained and mitigation implemented for impacts to this rare plant.

Biological Mitigation Area(s)

The DRSP proposes to preserve an off-site oak and Burton Mesa Chaparral habitat mitigation site within the Nipomo area. Located along the Temettate Ridge, the Dana Ridge site, will be placed into a conservation easement with a local non-profit to provide for the long-term management and maintenance of the site. Refer to Exhibit 3-2 for the location of the Dana Ridge Ranch site.

On-site habitat on DRSP occupied by sensitive species will be placed in protected easements. Appropriate off-site habitat will be preserved and/or restored to mitigate for impacts to rare species.

Exhibit 3-2: Biological Mitigation Site



3.2.2 *Cultural*

Cultural resources include historical, archaeological, and/or paleontological resources. An archaeological cultural resource site has been identified within the DRSP area. Site design and layout of the property has been designed to avoid impacting this location by integrating it within open space and avoiding excavation of the resource site.

Known archaeological resources shall be protected to the greatest extent practical. If additional archaeological resources are discovered during grading and construction activities the County's Inland Land Use Ordinance shall be applied, which may include, but is not limited to fencing or other protective measures around identified cultural resources.

3.2.3 *Conservation and Open Space Goals, Objectives, and Policies*

The following DRSP goals and objectives brought forward from Chapter 1 of this document and associated policies are provided to guide the recreation and open space uses envisioned within the DRSP area.

Goal 8

Maintain the large, centrally located oak woodland area as a site feature. Minimize impacts to special status plants and animals on-site.

Open Space Policy 8.a

Prepare a Oak Woodland Management Plan, Tree Protection Plan, Off-Site Habitat Acquisition and Preservation Plan, and On- and Off-Site Habitat Mitigation and Monitoring Plan to mitigate loss of coast live oaks on-site.

Open Space Policy 8.b

For unmitigable impacts to special status plant species, the mitigation ratios identified in the Environmental Impact Report shall be followed. Where feasible, plant salvage and seed collection shall be conducted prior to habitat disturbance.

Open Space Policy 8.c

The open space areas shall be a separate lot or lots under the ownership of the Homeowners Association. Open Space Policy 8.b

Open Space Policy 8.d

Ongoing maintenance of the oak woodland shall be conducted consistent with the approved Coast Live Oak Woodland Habitat Preservation Plan.

Open Space Policy 8.e

Interpretive signage may be installed at designated locations along the trail network and other open space areas to promote public awareness and education about oak woodlands and other special plant species within the DRSP area.

Example of interpretive signage identifying local habitats.

3.3 Recreation

A variety of recreational amenities are proposed within the DRSP area, including a public neighborhood park, pocket parks, pedestrian trails, and equestrian trails. The County of San Luis Obispo requires the provision of a minimum of 3 acres of parkland per 1,000 residents for the County's unincorporated communities. See Table 3.2 below for detailed County Parkland requirement calculations.

Table 3.2: Required Public Parkland

	Single-Family (RSF)	*Multi-Family (RMF)*
Total Homes	831	458
County Multiplier	0.00741	0.00564
Acres Required	6.16	2.58
Total Public Parkland Required (acres)	*8.74*	
Note: Non-residential uses are not required to provide public parkland per Chapter 21.09 of the County LUO.		

To address County parkland requirements, the DRSP includes a 10-acre, centrally located public neighborhood park adjacent to the oak woodland area. An additional 8.5 - 12 acres of publicly accessible but privately maintained pocket parks are to be provided within the residential neighborhoods, for a total of 18.5 - 22 acres of parkland within the DRSP.

3.3.1 Recreation Amenities

Public Park

The County's Parks and Recreation Element states that parks and trails contribute to a high quality of life and make our communities more livable. The proposed 10-acre public neighborhood park will be an amenity not only to the residents of the DRSP area, but also visitors and the community. Exhibits 3-3 and 3-4 demonstrates the conceptual character of the public park in the DRSP area.

Exhibit 3-3: Public Neighborhood Park Site Plan Concept

Exhibit 3-4: Public Neighborhood Park Birds-Eye

The following amenities are examples of what should be considered when developing the public park. This is not an exhaustive list and other complementary and/or similar amenities may also be included.

- Bicycle racks
- Drinking fountains
- Entry signage and landscaping
- Group and individual picnic areas
- Interpretive and educational panels
- Parking areas
- Playground or play features
- Restroom facilities
- Shade canopy
- Sports courts
- Trail connections
- Trash and recycle bins
- Wayfinding signage and/or kiosks


Shade structures and play equipment complement public recreation uses.

Pocket Park Areas

As a complement to recreation in the public park and trail system, pocket parks support and promote passive play, exercise, social gatherings, and family get-togethers for people of all ages and abilities. Pocket parks are accessible to residents and the public via the trails system.

These pocket park areas are specific to each neighborhood within the DRSP area and are integrated into the larger open space network. Positioning pocket parks along a system of connection trails enables users to enter the trail system and safely walk to each park within the DRSP.

The DRSP pocket parks will be designed with multigenerational activities and needs as well as emphasize the physical and social inclusion of all ages and abilities. Playground equipment and other hardscape features may be designed to complement the character and landscape of the DRSP property. Exhibit 3-5 illustrates the pocket park character and scale.

Exhibit 3-5: Pocket Park Concept

Pocket Park areas features may include but are not limited to the following:

- Bicycle racks
- Children's play area
- Picnic areas
- Interpretive and educational panels
- Natural play areas
- Neighborhood mailbox facilities
- Parking areas
- Trail connections
- Trash and recycle bins
- Wayfinding signage and/or kiosks

Examples of pocket park features.

Equestrian Trailhead and Trails

The DRSP area will provide equestrian trailhead access at the property's perimeter, as well as through open space areas to create a trail network on the property. Approximately 3.1 miles of equestrian trails will be accessible to residents and the community. The Equestrian Trail Head will be integrated at the southeastern corner of the property, providing a staging area for a limited number of trailers to load/off-load horses for trail access. The equestrian trail network will be available to residents of the DRSP area as well as to visitors and the community. The equestrian trails will be owned by a Homeowners Association, with a local non-profit(s) assisting in the ongoing operations and maintenance of the trail system. For specific equestrian trail standards and trail head features, refer to Chapter 4. Exhibit 3-6 illustrates an equestrian trail concept.

Exhibit 3-6: Equestrian Trail Concept

Pedestrian Trail System

Trails are an integral component of the DRSP's open space and recreational infrastructure. Connecting residential areas with shopping, dining, recreation, and jobs is accomplished through a series of connecting pedestrian trails.

Consistent with the goals, objectives, and policies of the DRSP, the pedestrian trails are an alternative mode of transportation encouraging residents to access nearby services without using their automobile. Approximately 3.8 miles of pedestrian trails will be accessible to residents and the community. Pedestrian trails provided in the DRSP area will be maintained by a Homeowners Association to ensure ongoing maintenance of the trail system. For specific pedestrian trail standards, refer to Chapter 4. The proposed pedestrian trail system configuration may change based on the ultimate configuration of each individual residential neighborhood. However, a

point(s) of access from the overall pedestrian trail system into/from each residential neighborhood shall be maintained, as shown by neighborhood on Exhibit 2-2a.

Example of pedestrian trail.

3.3.2 Recreation Goals, Objectives, and Policies

The following goals and objectives brought forward from Chapter 1 of this document and associated policies are provided to guide the recreation and open space uses envisioned within the DRSP.

Goal 2

Provide public neighborhood park and pocket parks and open space areas within each residential neighborhood, linking the neighborhoods together through a network of trails and open spaces.

Recreation Policy 2.a

Provide a pocket park or common open space area within each residential neighborhood.

Recreation Policy 2.b

Connect parks and recreation spaces within the DRSP through a network of pedestrian trails and sidewalks, thereby encouraging non-motorized transit.

Goal 7

Integrate a network of walking, bicycling, and equestrian facilities to connect on-site residential neighborhoods and the broader community.

Recreation Policy 7.a

Ensure walking and bicycling facilities are included to provide connections from residential neighborhoods to on-site open space, parks, and commercial areas.

Recreation Policy 7.b

Provide sidewalk, pedestrian trails, and bicycle access points to public park and open space amenities within the DRSP area for the community.

Recreation Policy 7.c

Create an equestrian trailhead and trail system.

Recreation Policy 7.d

Integrate informational and directional signage within open space, trails, and pocket park, reflecting a cohesive theming and branding of DRSP.

Recreation Policy 7.e

Public parkland will be owned and maintained by the County of San Luis Obispo. Pedestrian and equestrian trail systems will be owned and maintained by a Homeowners Association. Pocket parks will be owned and maintained by a Homeowners Association.

3.4 Recreation

3.4.1 Public Agency Maintained

The 10-acre public neighborhood park, identified in Chapter 2, shall be owned and maintained by the County of San Luis Obispo.

3.4.2 Homeowners Association

There will be a Homeowners Association(s) within the DRSP area. Refer to Chapter 8 for more information regarding Homeowners Association(s) within the DRSP.

3.4.3 Fire Protection/Vegetation Management

Within the overall DRSP site plan, best practices in fire protection and vegetation management will be implemented to ensure the safety of future residents. Fire protection and vegetation management within the DRSP will be consistent with CalFire/San Luis Obispo County requirements. Ongoing management will provide preemptive and preventative measures in preparing and planning for fire protection. Neighborhoods adjacent to the central oak woodland area and anticipated to be subject to the fire protection and vegetation management requirements of CalFire/San Luis Obispo County include Neighborhoods 3, 7, 8, and 9.

Proposed irrigated landscaping on public and private properties adjacent to the central oak woodland area will help buffer residences. The establishment and maintenance of additional emergency vehicle access points, street names, directional signage, building identification, and fuel modification measures also establish and add to fire protection within the DRSP area. These measures and programs incorporated at the time of site design and implemented at time of construction and prior to occupation will positively influence the responsiveness and preparedness during emergencies. Updates to strategies, best practices, and/or County requirements will be conveyed to residents through the Homeowners Association.

Site-specific requirements for identified neighborhoods include but are not limited to the following:

- A minimum defensible space shall be maintained around all buildings on the site per Cal Fire/San Luis Obispo County Requirements.
- Defensible space areas containing brush shall be thinned and/or masticated in accordance with recognized methods to minimize ground level fuel loads and lessen the potential impact of fire.

- In accordance with current Cal Fire/San Luis Obispo County Requirements, within 30-feet of permanent structures, trim trees, including oaks, to a minimum clear height of 6 to 8 feet above the ground to avoid continuous ladder fuels.
- Grasses that are dead, dormant, or directed to be trimmed by County Fire Official, shall be maintained at a maximum of 4 inches to minimize light flash fuels with the intent of mitigating continuous fire spread.
- Landscaping shall be fire resistant and meet County standards for fire resistant planting.

Defensible space areas around structure requirements (Source: CDF).

4 Circulation

4.1 Introduction

This chapter focuses on the street and other circulation systems within the Dana Reserve Specific Plan (DRSP). The goal is to provide an efficient and highly functional circulation network for pedestrians, bicycles, equestrians, automobiles, and public transit, consistent with the South County Inland Area Plan (SCAP) and Nipomo Community Plan policy direction. The overall framework for the street system design has been guided by the requirements of the County of San Luis Obispo Public Improvement Standards.

4.2 Street Network

The primary organizational element of the public street system within the DRSP area is focused on the primary roadways, or "backbone" roads, that connect to off-site roads within the vicinity or that act as a continuation of existing County maintained roads. These primary public roadways are identified as Collector 'A,' Collector 'B,' and Collector 'C' as described further below. In addition, other roadways within the DRSP area include those that are private and designated as Local Roads and Motorcourts, as described below. Regardless of which entity maintains the streets, a private Property/Homeowners Association will maintain all non-standard roadway features and landscaping amenities on collectors, local roads, and motorcourts. See *Exhibits 4-1 and 4-2* for an overview of the circulation plan, including individual proposed roadway types and their location within the DRSP.

Collector 'A'– North Frontage Road

Collector 'A' is designed as a County maintained public collector road that is located on the east side of the DRSP area. It is an extension of the existing North Frontage Road that currently terminates at the southeast corner of the DRSP area. This new road will complete a through connection from Tefft Street to Willow Road.

Collector 'B'- Pomeroy to Willow Road

Collector 'B' is designed as a County maintained public collector road that is located on the west side of the DRSP area. It provides a direct connection through the DRSP area from Pomeroy Road to Willow Road. At the Pomeroy connection with this new road, there will be a one-way stop intersection.

Collector 'C'

Collector 'C' is designed as a County maintained public collector road that is located centrally within the DRSP area. It provides a direct east-west connection between the planned Collector 'A' and Collector 'B.' At the intersections with Collector 'A' and Collector 'B,' there will be roundabouts.

Local Roads - Residential

Local Roads - Residential include those located within or serve the individual residential neighborhoods of the DRSP area. These roadways vary in orientation and design and are intended to provide the connection from the residential neighborhood to the collectors within the DRSP area. The County will not accept Local Roads into the County-maintained system. Therefore, a private mechanism for maintenance shall be established.

Private Motorcourts

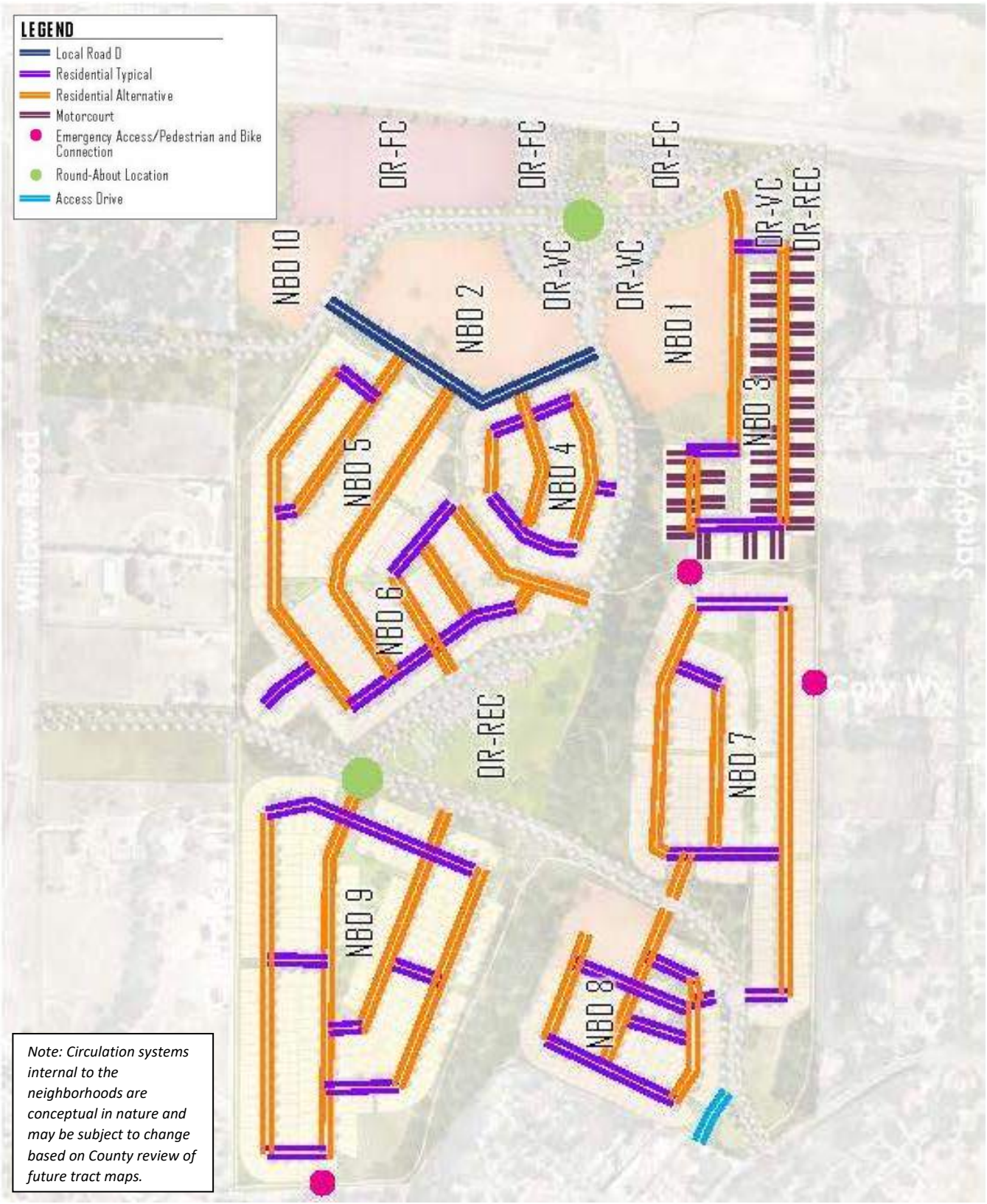
Private Motorcourts are located within Neighborhood 3. These private motorcourts vary in orientation and are intended to provide access to adjacent Local Roads within the DRSP area. The County will not accept Private Motorcourts into the County-maintained system. Therefore, a private mechanism for maintenance shall be established.

Private Access Drive

A Private Access Drive is located to the west side of Collector B, near the intersection with Pomeroy Road. This access drive is intended to maintain access for the adjacent property owners located west of the Hetrick Avenue right-of-way to Collector B while also providing access to the storm water basin for maintenance. The Private Access Drive will be privately maintained.

Exhibit 4-1: Primary Public Roadways

Exhibit 4-2: Local Roadways



Note: Circulation systems internal to the neighborhoods are conceptual in nature and may be subject to change based on County review of future tract maps.

4.2.1 *Circulation Goals and Policies*

The following overarching DRSP goals brought forward from Chapter 1 of this document and associated policies are provided to guide the circulation pattern and development envisioned within the DRSP area.

Goal 6

Enhance the circulation for the DRSP and existing community by continuing the existing public roadway network through the property to connect to Willow Road, providing a new park and ride lot to encourage carpooling, and creating new public transportation points of connection to facilitate public transit use and reduce single-occupant automobile use.

Circulation Policy 6.a

Extend North Frontage Road collector through the property to connect to Willow Road.

Circulation Policy 6.b

Provide a north-south collector roadway connection from Pomeroy Road to Willow Road through the property rather than along Hetrick Avenue right-of-way.

Circulation Policy 6.c

Interlink the north-south collector roads with an east-west collector road.

Circulation Policy 6.d

Introduce a new park and ride lot along North Frontage Road to encourage Countywide carpooling and reduce single-occupant automobile use.

Circulation Policy 6.e

Provide locations for new public transportation stops within the commercial land uses and park and ride locations.

Circulation Policy 6.f

Create emergency access points at the neighborhood edge to allow for additional fire/safety personnel access in Neighborhoods 7 and 9.

Goal 7

Integrate a network of walking, bicycling, and equestrian facilities to connect on-site residential neighborhoods and the broader community.

Circulation Policy 7.a

Provide Class IV bike lanes along Collectors 'A', 'B,' and 'C' to encourage bicycle use within and through the DRSP area.

Circulation Policy 7.b

Provide sidewalks along all road types to encourage walking and other non-motorized transportation within and through the DRSP.

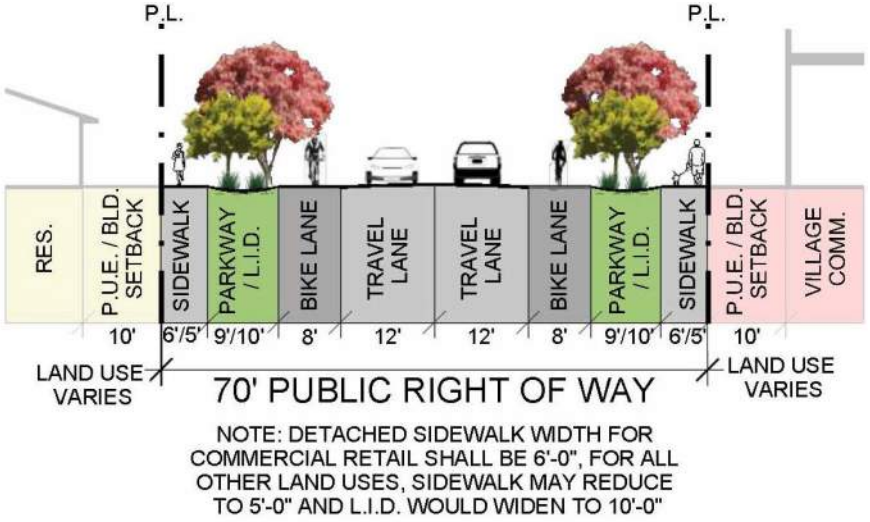
4.3 Street Cross Sections (New Roads)

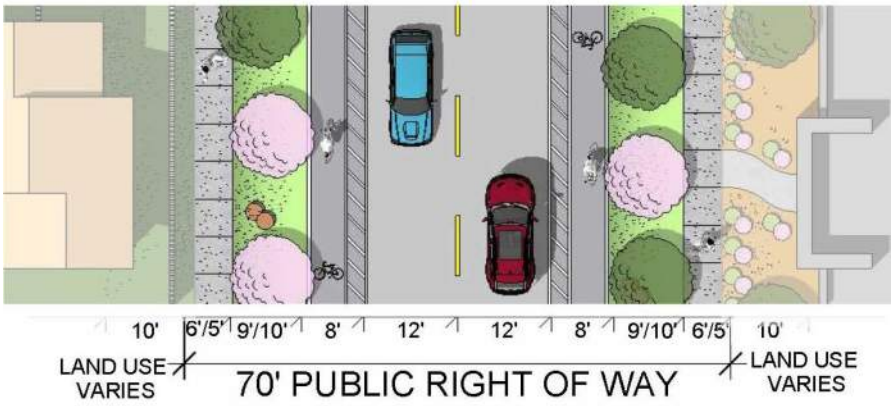
The following sections provide descriptions of the design of individual roadways within the DRSP by use of individual street cross-section exhibits. The design of the individual street cross-sections includes opportunities for decentralized stormwater treatment LID features within roadway right-of-way areas. For landscaping, lighting, and other features, refer to Appendix A – Design Guidelines.

4.3.1 *Collector 'A' and 'B' Typical*

Collector 'A' and 'B' Typical street section is designed as a 70-foot public right-of-way. From each side of the centerline, there will be a 12-foot travel lane, 8-foot Class IV bicycle lane, 9- or 10-foot parkway/LID feature, and 5- or 6-foot sidewalk. No on-street parking is provided. Flush curbs, also known as mow curbs, with a 2-foot shoulder are provided at the parkway/LID feature on both sides of the street, unless otherwise specified by the County. Ten-foot PUE's are incorporated outside the right-of-way on both sides of the street to accommodate necessary utilities to serve the adjacent land uses. See *Exhibit 4-3 for Collector 'A' and 'B' Typical* cross section details.

Exhibit 4-3: Collector 'A' and 'B' Typical

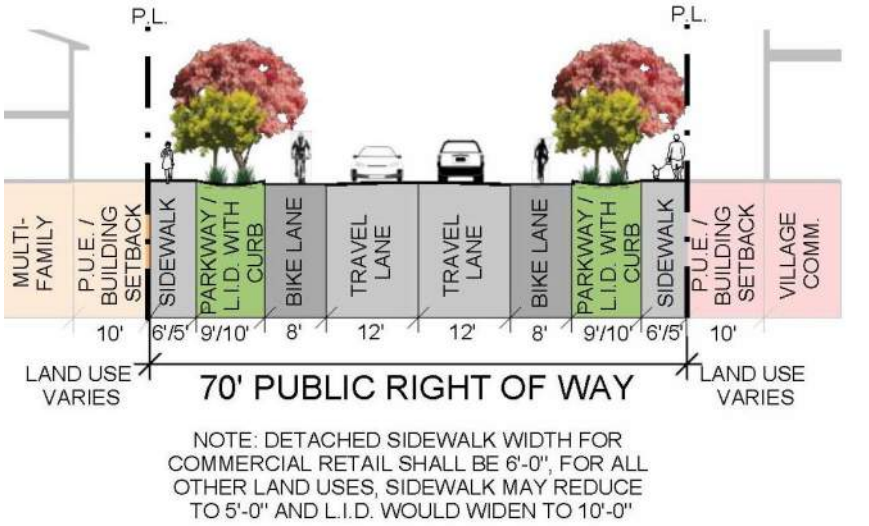


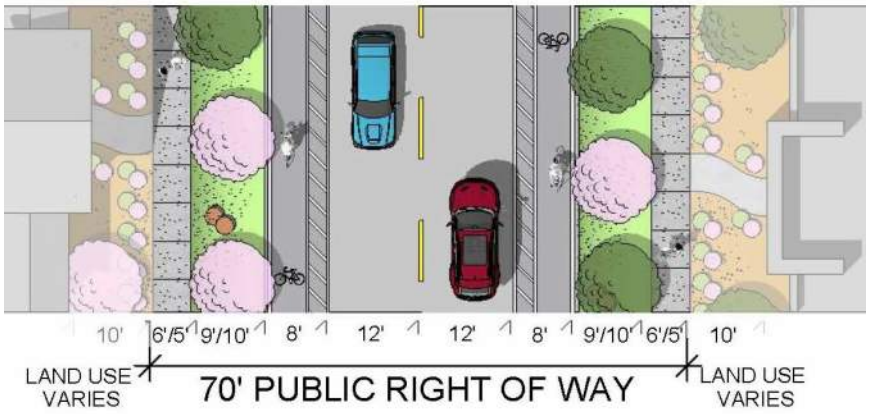


4.3.2 *Collector 'A' at Village Commercial Land Use*

Collector 'A' at Village Commercial Land Use street section is designed as a 70-foot public right-of-way. From each side of the centerline, there will be a 12-foot travel lane, 8-foot Class IV bicycle lane, 9- or 10-foot parkway/LID feature, and 5- or 6-foot sidewalk. No on-street parking is provided. Traditional curbs with gutters and curb cuts are provided at the parkway/LID features on both sides of the street. Ten-foot PUE's are incorporated outside the right-of-way on both sides of the street to accommodate necessary utilities to serve the adjacent land uses. See *Exhibit 4-4 for Collector 'A' at Village Commercial* cross section details.

Exhibit 4-4: Collector 'A' Adjacent to Village Commercial

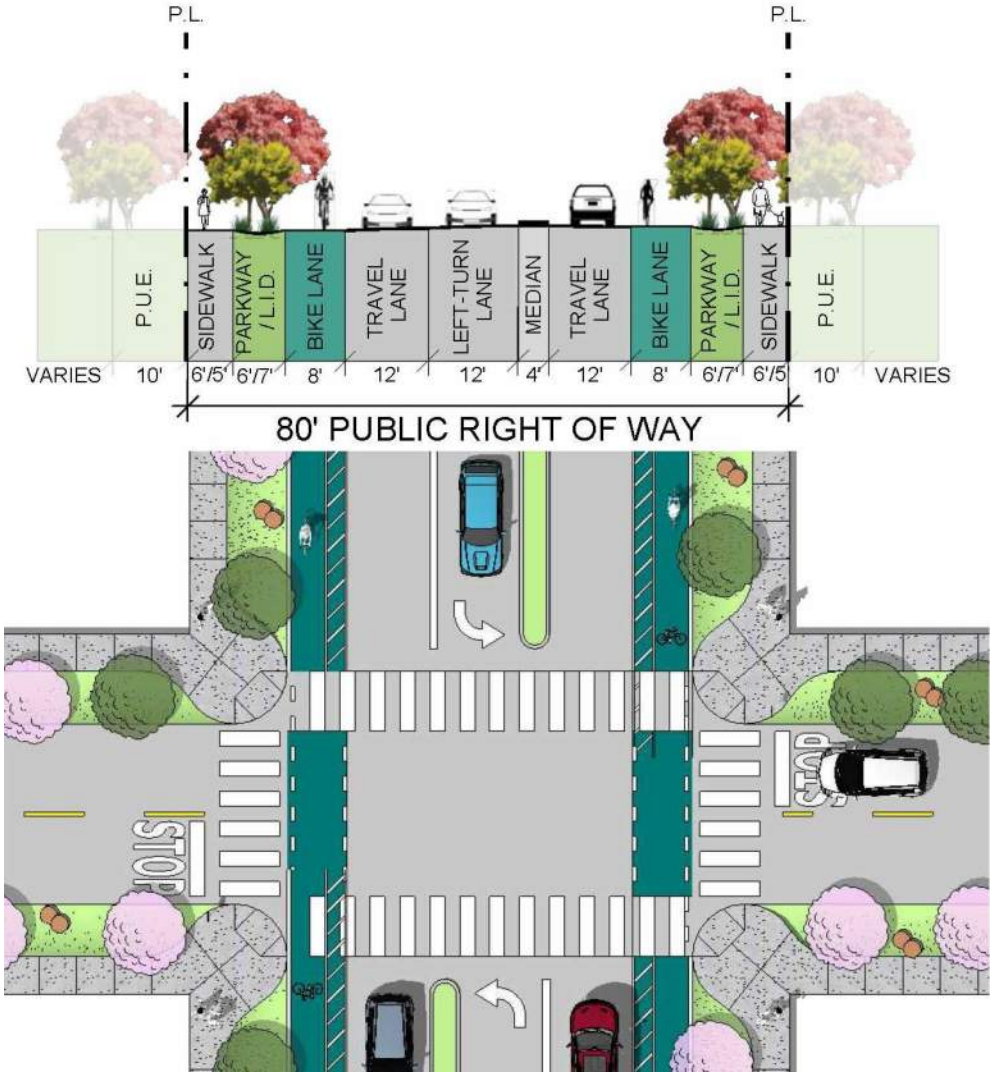




4.3.3 *Collector 'A' and 'B' at Left Turn Lane*

Collector 'A' and 'B' at Left Turn Lane street section is an 80-foot public right-of-way. From each side of the centerline, there will be a 12-foot left-turn lane and 4-foot median separating an 12-foot travel lane, 8-foot Class IV bicycle lane, 6- or 7-foot parkway/LID feature, and 5- or 6-foot sidewalk on one side of the street and a 12-foot travel lane, 8-foot bicycle lane, 6- or 7-foot parkway/LID feature, and 5- or 6-foot sidewalk on the other side of the street. No on-street parking is provided. Flush curbs with a 2-foot shoulder are provided at the parkway/LID feature on both sides of the street, unless otherwise specified by the County. Ten-foot PUE's are incorporated outside the right-of-way on both sides of the street to accommodate necessary utilities to serve the adjacent land uses. See *Exhibit 4-5 for Collector 'A' and 'B' at Left Turn Lane* cross section details.

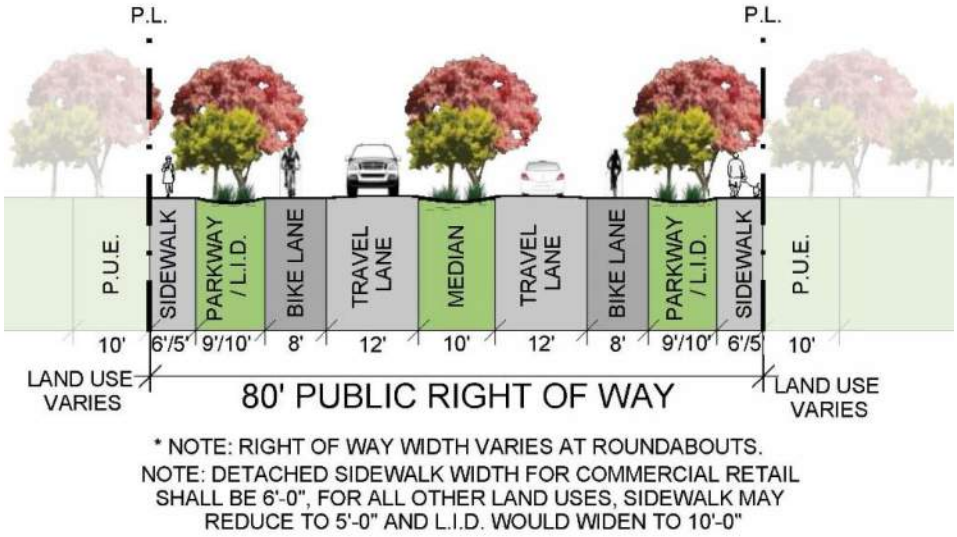
Exhibit 4-5: Collector 'A' and 'B' at Left Turn Lane

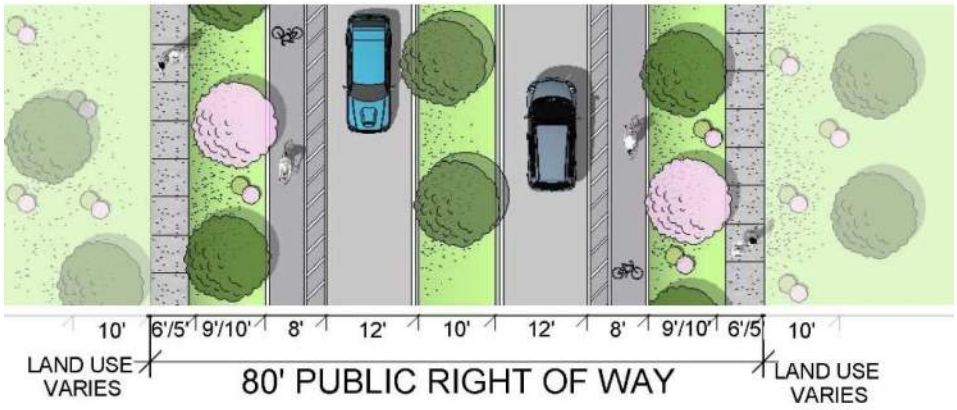


4.3.4 *Entries and Roundabouts, Collector 'A' and 'B'*

Entries and Roundabouts, Collector 'A' and 'B' street section is an 80-foot public right-of-way. From each side of the centerline, there will be a 10-foot median separating a 12-foot travel lane, 8-foot Class IV bicycle lane, 9- or 10-foot parkway/LID feature, and 5- or 6-foot sidewalk. No on-street parking is provided. Flush curbs with a 2-foot shoulder are provided at the parkway/LID feature on both sides of the street, unless otherwise specified by the County. Ten-foot PUE's are incorporated outside the right-of-way on both sides of the street to accommodate necessary utilities to serve the adjacent land uses. See *Exhibit 4-6 for Entries and Roundabouts* cross section details.

Exhibit 4-6: Entries and Roundabouts





4.3.5 *Park and Ride: Collector 'A'*

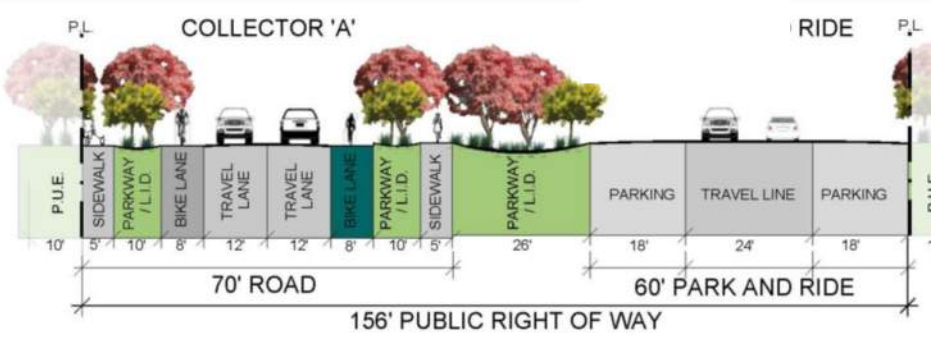
Park and Ride: Collector 'A' street section is designed to accommodate future northbound and southbound vehicular movement adjacent to park-and-ride lot. It is comprised of a minimum 156-foot public right-of-way with two separate areas – one area for Collector 'A' roadway and one for the Park and Ride lot.

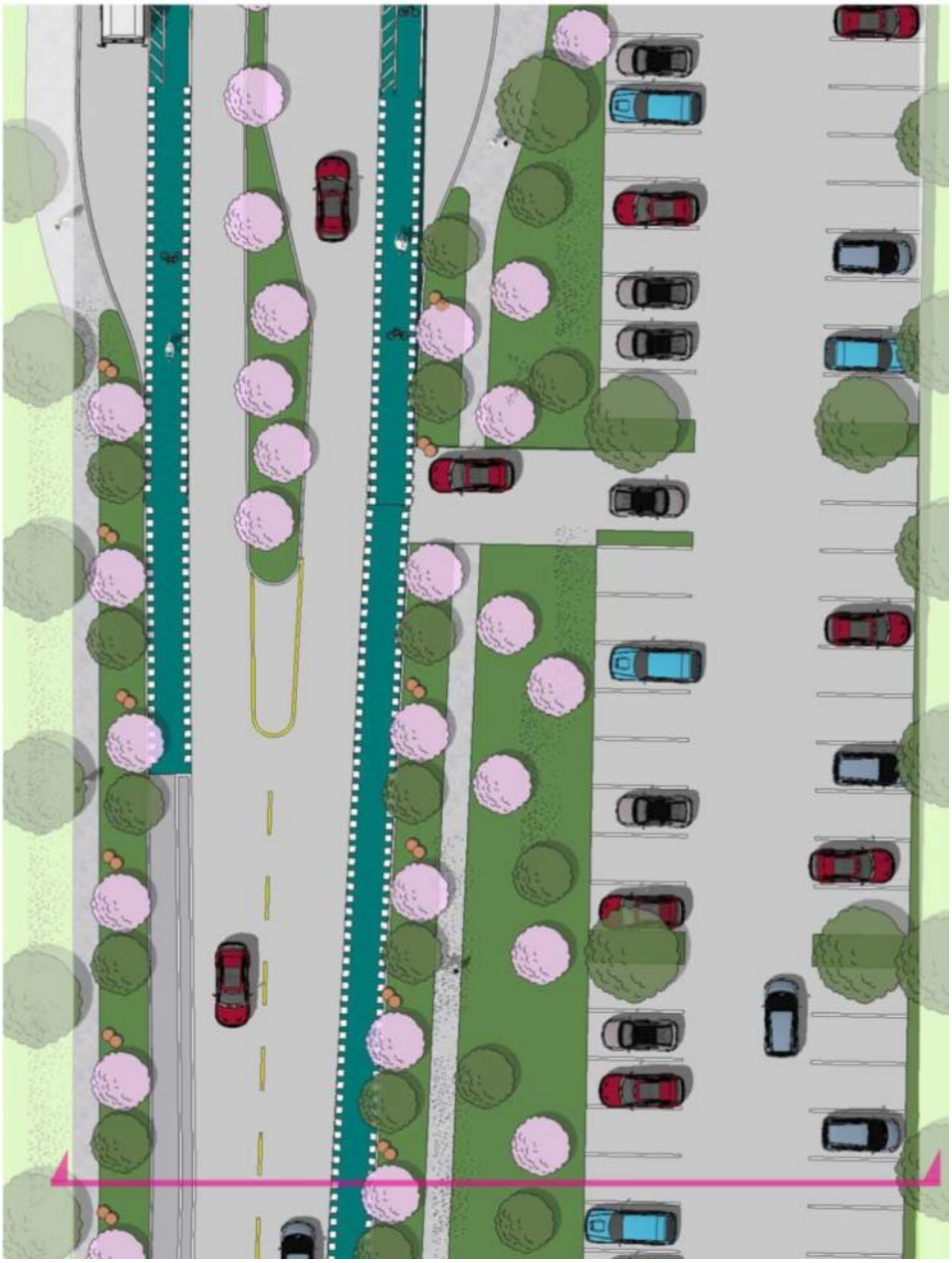
From each side of the centerline, Park and Ride: Collector 'A' roadway area includes a 12-foot travel lane, 8-foot bicycle lane, 9- or 10-foot parkway/LID feature, and 5- or 6-foot sidewalk. No on-street parking is provided. A flush curb with a 2-foot shoulder is provided at the parkway/LID feature on both sides of the street, unless otherwise specified by the County. Ten-foot PUE's are incorporated outside the right-of-way on both sides of the street to accommodate necessary utilities. The SCAP designates improvements along North Frontage Road as eligible for reimbursement by the County.

The Park and Ride area is comprised of a 24-foot travel lane and 18-foot parking stalls on both sides of the street centerline and will contain approximately 80 parking spaces. Flush curbs with a 2-foot shoulder are provided at the parkway/LID feature on both sides of the Park and Ride area, unless otherwise specified by the County. See *Exhibit 4-7 for Park and Ride Concept and Exhibit 4-8 for Park and Ride, Collector 'A'* cross section details.

Exhibit 4-7: Park and Ride Concept

Exhibit 4-8: Park and Ride: Collector 'A'

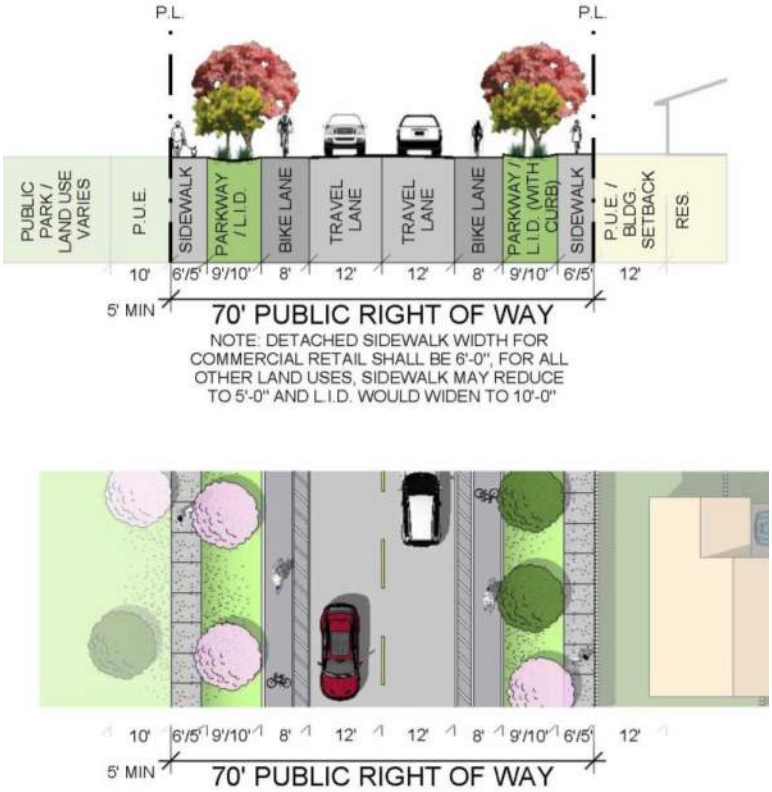




4.3.6 *Collector 'C'*

Collector 'C' street section is designed as a 70-foot public right-of-way. From each side of the centerline, there will be a 12-foot travel lane, 8-foot Class IV bicycle lane, 9- or 10-foot parkway/LID feature, and 5- or 6-foot sidewalk. No on-street parking is provided. A flush curb with a 2-foot shoulder is provided at the parkway/LID feature on the south side of the street, with traditional curbs with gutters and curb cuts to allow water flow provided at the parkway/LID feature on the north side of the street and on the southern portion of the street adjacent to multi-family and commercial land uses, unless otherwise specified by the County. A 10-foot PUE is incorporated outside the right-of-way on the north side of the street to serve the adjacent, various land uses. A 5-foot PUE is incorporated outside the right-of-way on the south side of the street to provide utility access to serve the adjacent uses. See *Exhibit 4-9 for Collector 'C'* cross section details.

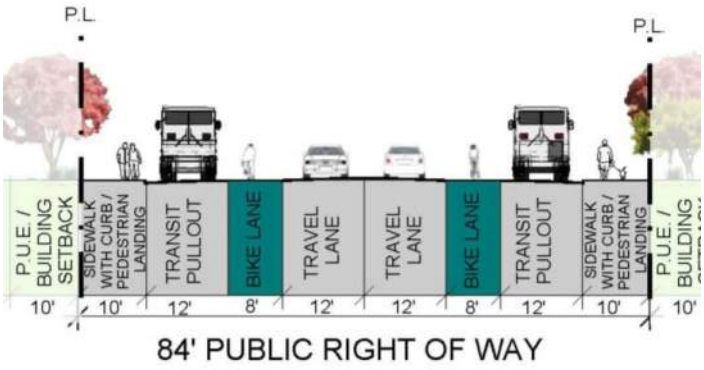
Exhibit 4-9: Collector 'C'

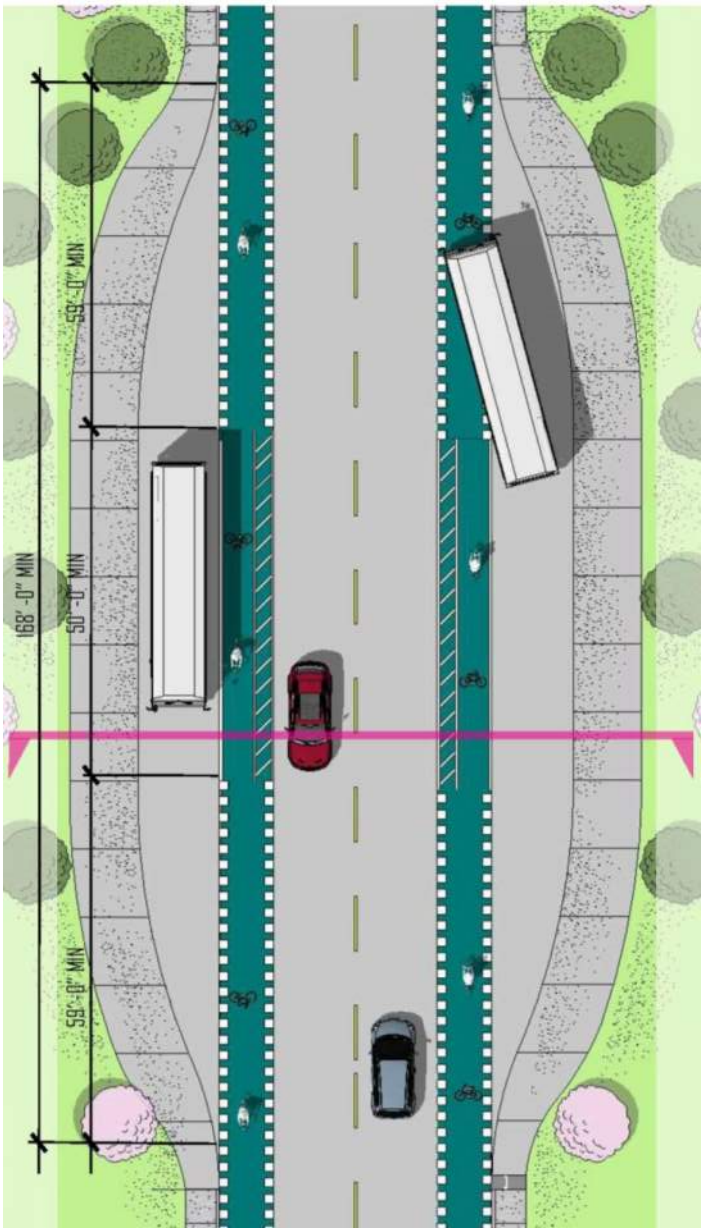


4.3.7 *Transit Stop at Collector*

Transit Stop at Collector street section is designed to accommodate a future transit stop along Collector 'A' and 'C'. It is comprised of an 84-foot public right-of-way and from each side of the centerline includes a 12-foot travel lane, 8-foot Class IV bicycle lane, 12-foot transit pullout lane, and a 10-foot sidewalk. No on-street parking is provided. Traditional curbs with gutters with pedestrian landings are provided at the sidewalks on both sides of the street. A pedestrian shelter will be provided based on County standards, as necessary. Ten-foot PUE's are incorporated outside the right-of-way on both sides of the street to accommodate necessary utilities to serve the adjacent uses. See *Exhibit 4-10 for Transit Stop at Collector* cross section details.

Exhibit 4-10: Transit Stop at Collector

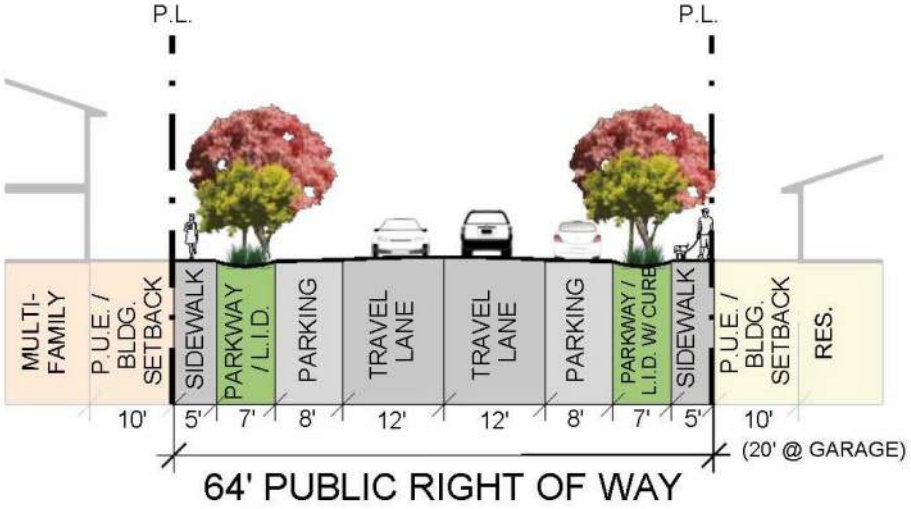




4.3.8 *Local Road 'D'*

Local Road 'D' street section is designed as a 60-foot right-of-way. From each side of the centerline, there will be a 12-foot travel lane, 8-foot parking lane, 7-foot parkway/LID feature, and a 5-foot sidewalk. On-street parking is provided. Flush curbs will separate the parking lanes from the parkway/LID feature. Ten-foot PUE's are incorporated outside the right-of-way on both sides of the street to accommodate necessary utilities to serve the adjacent uses. Class III bikeways are integrated and intended to be shared with the on-street vehicle traffic. See *Exhibit 4-11 for Local Road 'D'* cross section details.

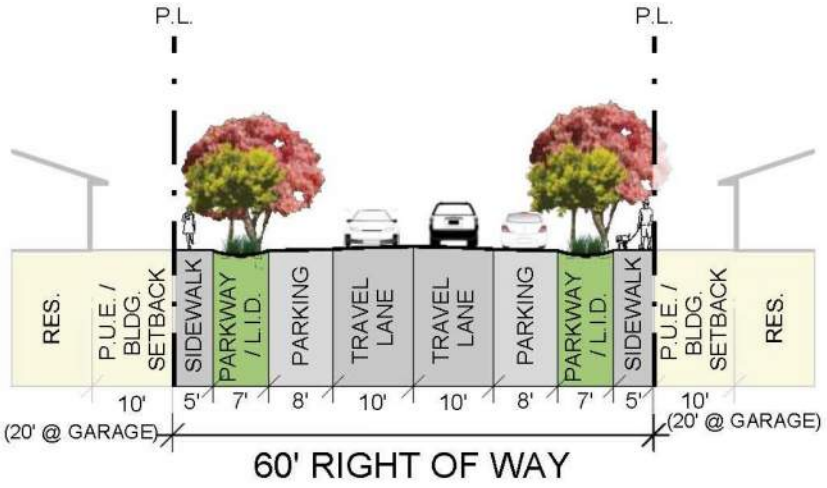
Exhibit 4-11: Local Road 'D'

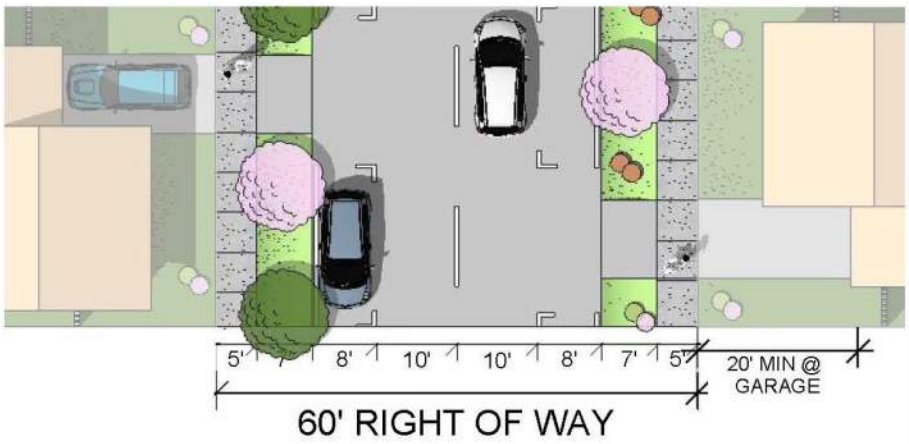


4.3.9 *Single-Family Street, Typical – Local Road*

The *Single-Family Street, Typical* local road, street section is designed as a 60-foot right-of-way. From each side of the centerline, there will be a 10-foot travel lane, 8-foot parking lane, 7-foot parkway/LID feature, and 5-foot sidewalk. On-street parking is provided. Rolled curbs are proposed to separate the parking lane from the parkway/LID feature and will include associated spillways and depressions to allow water flow into the parkway/LID area. Ten-foot PUE's are incorporated outside the right-of-way on both sides of the street to accommodate necessary utilities to serve the adjacent land uses. This street cross-section is found within the single-family neighborhoods including portions of Neighborhoods 3, 4, 5, 6, 7, 8, and 9. Class III bikeways are integrated and intended to be shared with the on-street vehicle traffic. See *Exhibit 4-12 for Single-Family Street, Typical* cross section details.

Exhibit 4-12: Single-Family Street, Typical

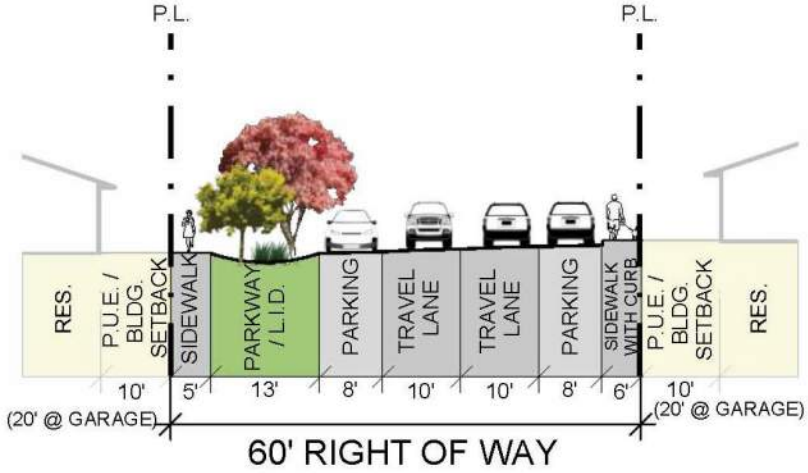


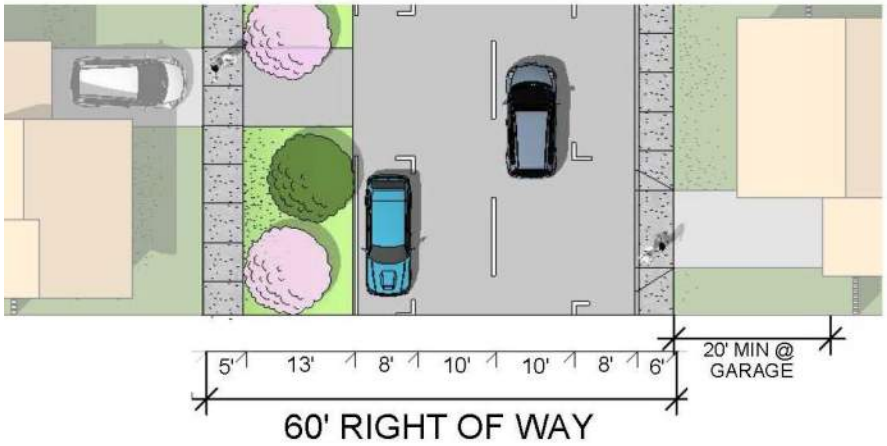


4.3.10 *Single-Family Street, Alternative – Local Road*

The *Single-Family Street, Alternative local road,* street section is designed as a 60-foot wide right-of-way. From each side of the centerline, there will be a 10-foot travel lane, an 8-foot parking lane, and a 5-foot sidewalk. The right-of-way also includes a 13-foot parkway/LID feature on one side of the street only in between the sidewalk and parking lane. On-street parking is provided. A rolled curb is provided at the parkway/LID side of the street that will include associated spillways and depressions to allow flow into the parkway/LID area, while a traditional curb with no gutter is provided on the alternative side of the street. Ten-foot PUE's are incorporated outside the right-of-way on both sides of the street to accommodate necessary utilities to serve the adjacent land uses. This street cross-section is found within the single-family neighborhoods including portions of Neighborhoods 3-9. See *Exhibit 4-13 for Single Family Street, Alternative* cross section details.

Exhibit 4-13: Single-Family Street, Alternative

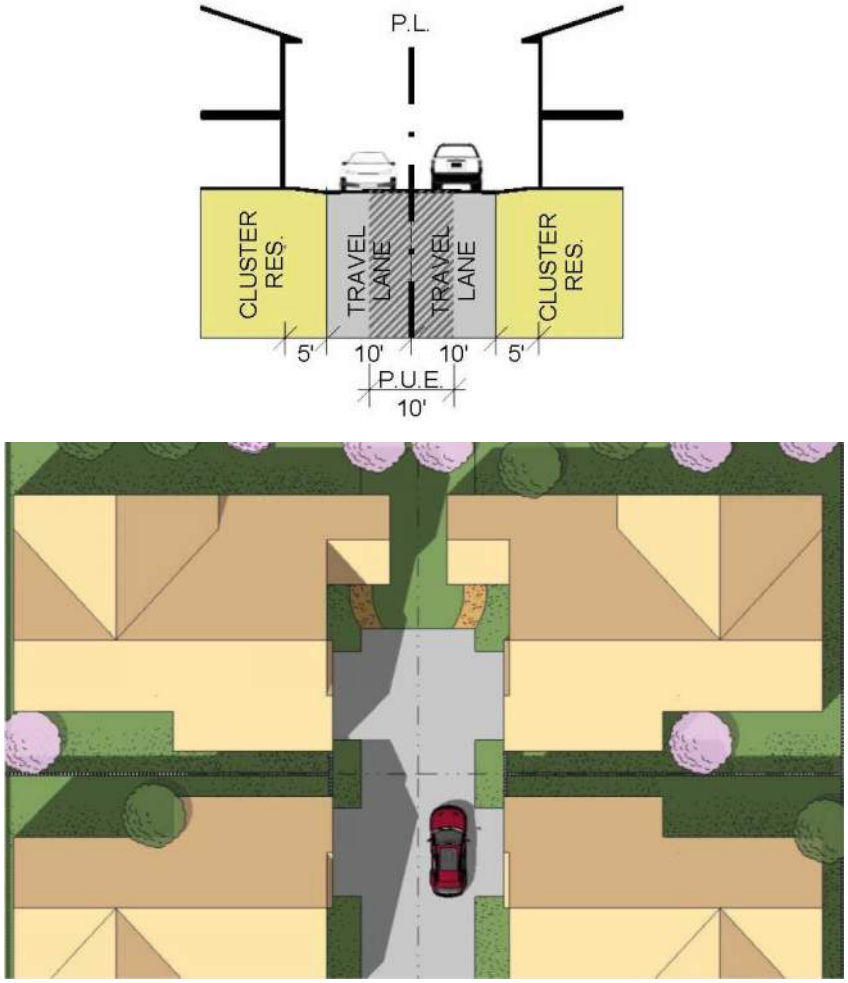




4.3.11 *Motorcourt – Private*

The Motorcourt section is designed as a 20-foot private access easement. From each side of the centerline, there will be a 10-foot travel lane providing access to residential homes with a ribbon gutter for drainage located at the centerline. No parking on the private motorcourt is allowed, except in designated guest spaces. Traditional curbs and gutters are provided on either side, with the individual home setback 5-feet from the private access easement. Property lines of adjacent residential homes continue to the centerline of the private access easement and a 10-foot wide PUE is provided at the centerline. See *Exhibit 4-14 for Motorcourt - Private* cross section details.

Exhibit 4-14: Motorcourt - Private



4.3.12 *Access Drive – Private*

The Access Drive is designed as a 20-foot private shared driveway. The shared access drive will be gated and provide access to the existing residences located to the west of the Hetrick Avenue right-of-way. A 12-foot access drive branching off the main access drive will also be provided to service the adjacent storm water basin.

4.4 Street Cross Sections (Existing Off-Site Roads)

4.4.1 *North Frontage Road*

North Frontage Road is an existing off-site public collector road that runs parallel to U.S. Highway 101 just south of the DRSP area. It currently dead-ends at the adjacent property at the southeast corner of the DRSP area. The South County Circulation Study identifies the extension of this existing road to Willow Road. As part of the DRSP, North Frontage Road will be extended through the project to Willow Road. Refer to Section 4.3 for additional information regarding the North Frontage Road (Collector A) extension.

4.4.2 *Pomeroy Road*

Pomeroy Road is an existing off-site public arterial road that generally runs north to south and is located in the southwest corner of the DRSP area. It is currently designed with a 12-foot lane and a Class II bicycle lane of varying 5- to 7-foot width on both sides of the street centerline. To provide a better north-south road connection to Willow Road, Collector 'B' is proposed to run through the DRSP area beginning at Pomeroy Road. To enhance safety and minimize vehicle conflicts, a one-way stop is proposed at the Pomeroy Road and Collector Road B intersection. This would reroute a small portion of Pomeroy Road into The Dana Reserve property to accommodate the necessary road geometry.

4.4.3 *Hetrick Avenue*

Hetrick Avenue is an existing off-site public local road that runs along a portion of the western boundary of the DRSP area. Under existing conditions, Hetrick Avenue turns sharply to the west along the western boundary and turns into Glenhaven Place, another local public road. The Nipomo Community Plan Circulation Element and South County Circulation Study identify a Hetrick Avenue extension that is currently unbuilt. It would turn sharply to the east at the current intersection with Glenhaven Place and travel through a dense oak woodland area before turning south along the rear yards of existing residential properties to the west. The DRSP does not propose to construct the Hetrick Avenue extension, in favor of introducing a functionally superior Collector 'B,' which travels from Pomeroy Road through the DRSP and connects with Willow Road. Currently, Hetrick Avenue right-of-way at the southwest corner of the property near Pomeroy Road would be abandoned, re-routed, or deeded to the adjacent existing residential property owners to the west. Access for the three (3) existing residential properties to the west of Hetrick Avenue, most immediate to Pomeroy Road, would be maintained via an access drive to Collector B (see Section 4.3.12). The proposed Collector B would have the necessary right-of-way width and reduce impacts to the existing neighborhoods on Hetrick Avenue. The portion of Hetrick Avenue to be used for emergency access to the DRSP area will be improved to County Public Improvement Standards.

4.4.4 *Cherokee Place*

Cherokee Place runs along the northern property line of the DRSP area, beginning at Hetrick Avenue in the west and terminating approximately +/- 575 feet from the U.S. Highway 101 right-of-way. It is currently an unpaved road that is approximately +/- 20 feet in width. Improvements along Cherokee Place are anticipated adjacent to APN's 091-301-031 and 091-301-030 along with right-of-way dedication, to be reviewed and approved by Public Works. Along the frontage of APN's 091-301-031 and 091-301-030, there will be a 20-foot-wide paved section aligned with the

existing unpaved road that lies within the northern 25-foot offer of dedication on Cherokee Place. Improvements elsewhere along Cherokee Place are not anticipated as part of this DRSP effort.

4.4.5 *Cory Way*

Cory Way is an existing off-site public local road that terminates at the southern property line of the DRSP area. As discussed under Section 4.6 below, emergency access only is planned for where Cory Way terminates at the property, but pedestrian, bicycle, and equestrian connections will also be provided at this existing off-site road. No routine vehicle access is planned for this existing off-site public local road into the DRSP area.

4.5 Intersections and Roundabouts

4.5.1 *Intersections*

Five intersections connect the surrounding community to the DRSP area. These include Collector 'A' and Collector 'B' at Willow Road, Collector 'A' and Collector 'B' at Cherokee Place, and Collector 'B' at Pomeroy Road. Collector 'A' at Willow Road is envisioned as a new signalized three-way intersection, which is located approximately +/- 1,000 feet from the U.S. Highway 101 on-ramps. Collector 'B' at Willow Road will be a one-way stop where Collector 'B' meets Willow Road, allowing for unimpeded traffic flow along Willow Road. Both Collector 'A' and Collector 'B' at Cherokee Place are envisioned as two-way stops along Cherokee Place, allowing for unimpeded traffic flow along with the DRSP collectors. Lastly, Collector 'B' at Pomeroy Road is a one way stop intersection. As noted above in Section 4.4, a small portion of Pomeroy Road will be rerouted into The Dana Reserve property to accommodate the necessary geometry for the new road connection. Ultimately, intersection control type will be reviewed and approved by Public Works.

4.5.2 *Roundabouts within DRSP*

There are two roundabouts located within the DRSP area. These are intended to enhance safety and reduce overall vehicle speeds. These roundabouts are located entirely within the DRSP and include Collector 'A' at the Village Commercial area, where this roadway intersects with Collector 'C.' Another is located along Collector 'B' adjacent to Neighborhoods 6 and 9, where this roadway intersects with Collector 'C' (refer to Exhibit 2-1 in Chapter 2 for locations).

Roundabouts calm traffic and slow speeds in residential and commercial neighborhoods.

The integration of roundabouts within the DRSP provides organizing features for the overall circulation network. These features within the roundabouts enhance the overall aesthetic of the community and may include features such as specimen trees, accent landscaping, unique paving, lighting and/or project signage.

4.6 Emergency Access

Two emergency access points are located in the DRSP. These will ensure adequate service by fire and safety personnel in the future. Emergency access points are proposed within Neighborhood 9, adjacent to Hetrick Road, and within Neighborhood 7, as a continuation of Cory Way.

The emergency access points will be constructed with adequate width to accommodate fire/safety vehicles and be gated per CalFire/County Public Improvement Standards.

The DRSP also envisions these emergency access points be designed to include pedestrian, bicycle, and equestrian access as further discussed in Section 4.9 below, providing access to the existing community.

4.7 Bicycle Network

To close existing gaps within the County's bicycle network and to promote non-motorized transit use within the DRSP area, an extensive bicycle network has been proposed in conjunction with the property's primary collector roadway design (see *Exhibit 4-15*). As noted in the 2016 San Luis Obispo County Bikeways Plan, Class II bikeways exist on Pomeroy Road to the south and Willow Road to the north, with plans for expansion of Class II bikeway facilities along the North Frontage Road to the south.

Collector roads 'A', 'B,' and 'C' will have Class IV separated bikeway with an 8-foot right of way. The design of these separated bikeways will include a 5-foot travel lane and 3-foot pavement markings (e.g., striping) to separate bicycle riders from automobile travel lanes. Additional pavement marking within bicycle-automobile conflict zones, such as at intersections or driveway entry points, will be painted green per County standards to bring greater attention to these conflict points. To ensure adequate storage of bicycles within the DRSP, bicycle racks will be incorporated as part of commercial developments as well as within the public park area per County Standards.

Exhibit 4-15: Bicycle Network

4.8 Equestrian Network

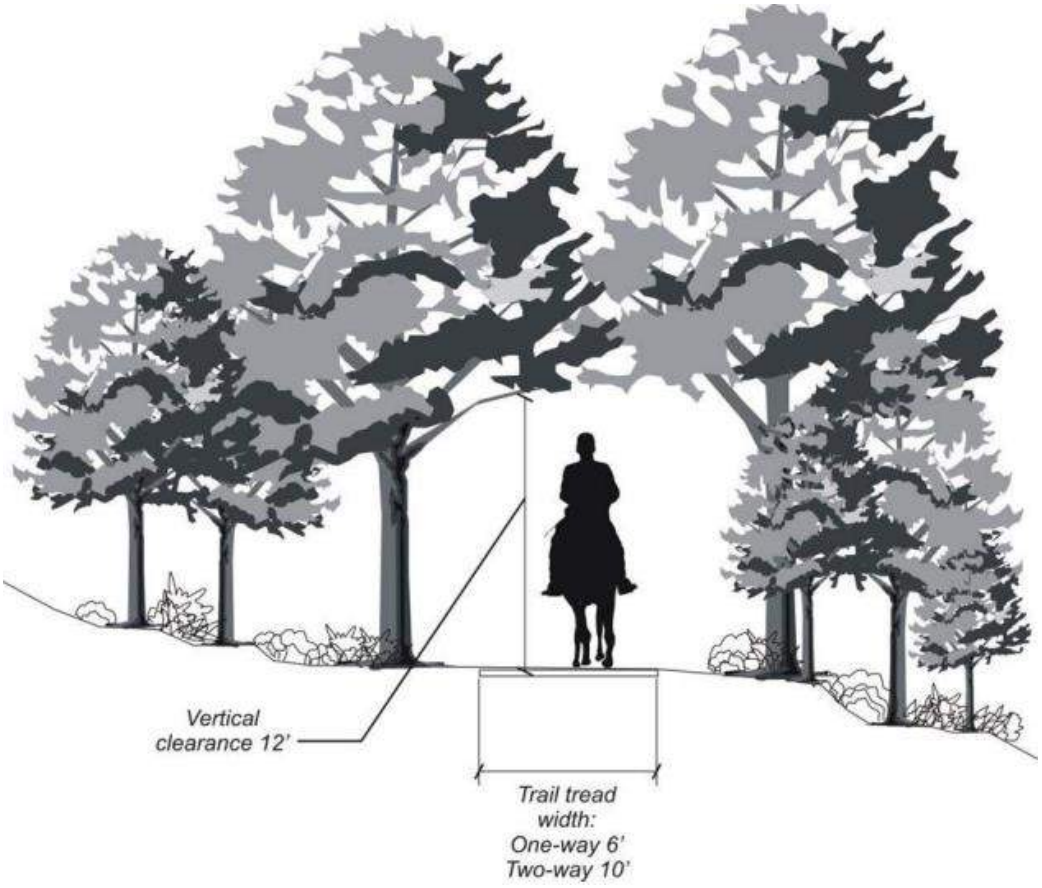
To continue the long tradition and presence of equestrians within Nipomo, an equestrian trail network has been integrated as an amenity for use by future residents in the DRSP, as well as by community members. Two primary equestrian trail loops are proposed, one in the northern half of the property and the other in the southern half, both of which meet in the middle of the property, as outlined in *Exhibit 4-16: Trails Map*.

4.8.1 *Trails*

The equestrian trails are proposed to be built to the County of San Luis Obispo's Horse Trail Standards, identified in Appendix B of the Parks and Recreation Element (see *Exhibit 4-17: Equestrian Trail Standards* below). A minimum of 15-feet of right-of-way will be included to allow the trails to meander and provide for adequate landscaping and buffering/screening from adjacent properties. Where the equestrian trails travel through oak open space areas at the center of the property, the trail easement will be limited to 10-feet.

Exhibit 4-16: Trails Map

Exhibit 4-17: Equestrian Trail Standards (County of San Luis Obispo - Parks and Recreation Element, Appendix B)



4.8.2 *Trailhead*

A trailhead facility is also proposed as part of the DRSP. It is intended to accommodate equestrian users. The trailhead facility is located at the southeast corner of the DRSP area. It will be accessed from Collector A (North Frontage Road). Trailhead facilities will include parking to allow for eight (8) vehicles with trailers to pull through and park, hitching posts, information, and signage. Maintenance of equestrian trails and associated facilities are anticipated to be maintained by the Homeowners Association in cooperation with local equestrian organizations, as discussed in Chapter 3. Restroom facilities at the trailhead are anticipated as being provided as temporary rental or leased facilities provided by local equestrian organizations. Refer to *Exhibit 4-18: Equestrian Trailhead Concept.*

Exhibit 4-18: Equestrian Trailhead Concept

4.8.3 *Crossings*

Equestrian trail crossings occur at both Collectors 'B' and 'C' within the DRSP. Crossings will be constructed to meet the standards identified in Figure 5-3 of the U.S. Department of Agriculture – Equestrian Design Handbook, as shown in *Exhibit 4-19: Equestrian Trail Crossing*.

Exhibit 4-19: Equestrian Trail Crossing

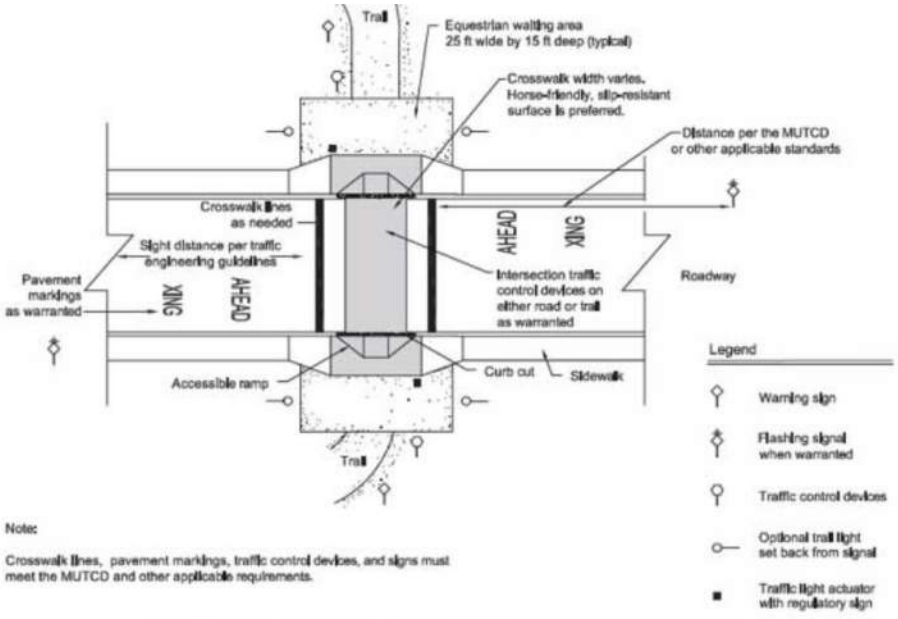


Figure 5–3—An at-grade trail crossing (with signals) for equestrians.

4.9 Pedestrian Network

4.9.1 *Sidewalks*

As illustrated in the Street Cross Section exhibits in Section 4.3, most of the streets within the DRSP area contain sidewalks on both sides of the street, except for the Private Motorcourts. Depending on their location within the DRSP area, sidewalk widths vary from 5-feet to 6-feet. In general, those sidewalks located within the commercial areas have been designed to be wider than those within the residential neighborhoods.

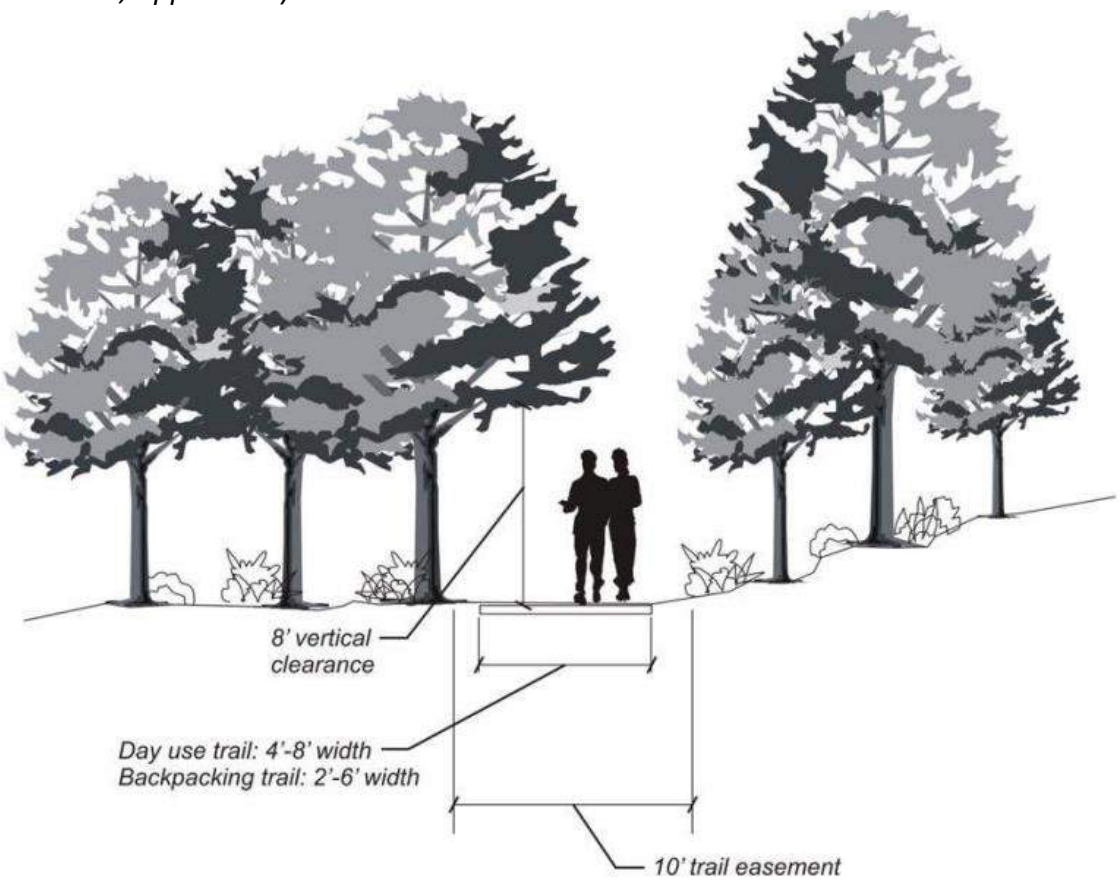
4.9.2 *Pedestrian Trails*

As an amenity to the future residents of the DRSP neighborhood and the existing community, an extensive pedestrian trail network has been proposed. See *Exhibit 4-19* for pedestrian trail locations. The pedestrian trails have been integrated in a manner to provide both recreational opportunities as well as connect the individual neighborhoods to the commercial and job areas of the site without the need to use an automobile.

Pedestrian trails will be built to the County of San Luis Obispo's Pedestrian Trail Standards, identified in Appendix B of the Parks and Recreation Element (see *Exhibit 4-20: Pedestrian Trail Standards*). A minimum of 10-feet of right-of-way will be provided to allow the trail to meander and provide for adequate landscaping and buffering/screening from adjacent properties.

Pedestrian trail through open space concept.

Exhibit 4-20: Pedestrian Trail Standards (County of San Luis Obispo - Parks and Recreation Element, Appendix B)



4.10 Public Transit

To encourage the use of public transit to and from the DRSP area by residents, employees, and visitors, public transit hubs are proposed. These include a transit hub within the Village Commercial area, just west of the roundabout, as well as the park-and-ride lot located along Collector A (North Frontage Road) just south of Willow Road. Transit hubs are located within the road right-of-way and the San Luis Obispo County Regional Transit Authority (RTA) is expected to provide service to and stops within these designated transit hub locations. See Exhibits 4-6 and 4-8 for conceptual transit stop locations and right-of-way interface.

4.11 Streetscape

4.11.1 *Entry Feature Design*

To bring attention to and highlight entry into the DRSP area for both residents and visitors, primary and secondary entry features are proposed in various locations within the neighborhood. Primary entries will be located at the intersection of Collector 'A' and Collector 'B' at Willow Road as well as Collector 'A' at the southern end of the Village Commercial land use area. Secondary entry features are located at the one way stop intersection where Collector 'B' and Pomeroy Road intersect, at Collector 'B' and Cherokee Place, and Collector 'A' and Cherokee Place. Refer to

Exhibit 2-2a in Chapter 2 for the specific locations of both the primary and secondary entry features within the DRSP area.

Future design of the primary and secondary entry features should include:

- High-quality materials that reflect the DRSP area character; and
- A combination of the following elements:
  - Primary Entry Signage
  - Secondary Entry Signage
  - Decorative Walls
  - Specimen Trees
  - Accent Landscaping
  - Enhanced Paving (colored and/or textured)

Example of neighborhood identification signage.

Example of wayfinding/trail signage identification.

4.11.2 *Streetscape Accent Paving Design*

Enhanced accent paving is envisioned within the DRSP area at pedestrian crossings and roundabouts along Collectors 'A', 'B,' and 'C.' Utilizing accent paving at pedestrian crossings and roundabouts will provide contrasting color from the adjacent roadway and enhance visibility and safety for pedestrians and vehicles. Paving design along these collectors should consist of material and color that is complementary to the overall design aesthetic of these primary roadways. All accent paving selected should be compliant with applicable American Disabilities Act (ADA) requirements.

Example of accent paving treatment Applied at the intersection.

Example of accent paving enhances parking design.

4.11.3 *Landscape Design*

Landscape design throughout the DRSP area will reflect local climatic and soil conditions while reflecting the bucolic character of the community. While individual landscape palettes will vary along the streets within residential neighborhoods and within the commercial areas, common landscape areas along Collectors 'A', 'B,' and 'C,' and Local Road 'D' will have a consistent aesthetic to establish a baseline for the overall neighborhood character. Landscape design within parkways and medians along Collectors 'A', 'B,' and 'C,' and Local Road 'D' should integrate the following:

- A unified design that reflects the bucolic character and local climatic and soil conditions of the neighborhood;
- Include a variety of trees, shrubs, and groundcover;
- Ensure landscaping is drought tolerant and water-wise;
- Integrate street and parkway trees to create a street tree canopy, provide shade, and define the street edge;
- Use flowering or accent trees in key locations such as project entries, roundabouts, intersections, pedestrian crossings, and other focal points for visual emphasis.
- Utilize low maintenance, long-lived, and durable plantings and minimize the use of perennials;
- Integrate accent cobbles, boulders, and/or rock mulch; and
- Locate and place plantings to accommodate roadway safety.

Unified landscape design concept with drought-tolerant landscaping incorporated.

All landscaping within parkways and medians along collector roads within the DRSP area will comply with applicable federal, state, and local building, public health, safety and accessibility codes, and the California Model Water Efficient Landscape Ordinance (MWELO - AB 1881).

4.11.4 *Parkway/Low-Impact Development Design*

Biofiltration and bioretention features reflect best management practices in stormwater management by slowing and filtering stormwater runoff. These systems are often utilized to manage runoff associated with streets, parking areas, and other hardscaped areas. These can be integrated into parkway design along streets and/or in other landscaped areas. Typically, these systems are planted with vegetation that is tolerant of heavy watering and alternatively, drought conditions.

The DRSP has incorporated an extensive network of bioretention features to further sustainable stormwater practices and maximize retention/recharge opportunities on-site. Within the DRSP area, except for the Private Motorcourts and Collector 'C' – Bus Pullout, all streets are proposed to contain parkway low-impact development (LID) areas within the street right-of-way to capture and treat runoff from impervious roadway areas.

To enhance the character of the overall DRSP area, parkway/LID features should consist of a landscape palette tolerant of heavy watering winter conditions as well as drier, drought-like conditions. The landscape palette should consist of a blend of trees, shrubs, and groundcover, as well as decorative rocks and boulders placed intermittently for both aesthetic and functional qualities within the parkway area. Where standard curbs are proposed adjacent to parkway/LID features, curb cuts should be provided intermittently to allow for sheet flow of water off the roadways and into the parkway/LID areas.

Parkway medians provide opportunities for decentralized biofiltration and retention.

5 Infrastructure and Phasing

5.1 Introduction

This Chapter describes the major backbone infrastructure and utilities required to support development of the Dana Reserve Specific Plan (DRSP) area. Public utilities include potable water system, wastewater system, stormwater facilities and other utilities such as natural gas, electrical, telephone, and cable/data service. Additionally, future developers in the DRSP area will pay NCSD water and wastewater development impact fees.

5.2 Water

Potable water for the DRSP area will be supplied by NCSD. Table 5.1 on the following page summarizes the water use factors and demand calculations for the anticipated land uses in the DRSP. The total demand is estimated at 351.83 acre-feet per year (AFY), with the total demand plus a 10% contingency estimated at 387.01 AFY. An estimated 82.52 acre-feet of the total 351.83 acre-feet would be used for commercial development, daycare, and landscaped common areas. The NCSD has reviewed water demands for the DRSP area and are conducting an in-depth study to validate their determination that there is an adequate and reliable water supply for buildout of the DRSP area.

As shown in Exhibit 5-1, the water system for the DRSP area is proposed to be comprised of a 12" main line extension from the stub in North Frontage Road, at the southeast corner of the property, to Willow Road and will also include an internally looped system of 8" public water main line, which will provide fire suppression to the development areas. These will be routed within the public roads. The main trunk lines will be owned and operated by NCSD. The private main line system for the commercial areas will be protected at each connection point to the public system with a double detector check assembly.

Domestic water services for each development area are proposed to utilize County and NCSD standard water services and meters. Service connections will connect to the above referenced 8" domestic main lines. Waterlines are proposed to be routed within streets or easements. Fire hydrants will be located adjacent to roadways and spacing will be no greater than 500 feet, except on dead end streets it shall be no more than 400 feet. The maximum distance from any point on the street frontage to a hydrant shall be 250 feet. For commercial or light industrial areas, the maximum spacing will be no greater than 250 feet or less, as required by the Fire Official. Hydrants or tie-ins for future hydrants may be required by the fire official and shall typically limit the distance from any point on the exterior of any building to 150 feet.

As shown in Exhibit 5-2 below, the DRSP may install recycled water lines to make the project "recycled water" ready. If NCSD is able to provide recycled water to the DRSP, recycled water will be utilized for landscaping within the village and commercial area, public recreation, neighborhood parks, and streetscape and parkway areas. Irrigation for these identified areas will be converted from potable water to recycled water at that time.

5.2.1 *Operations and Maintenance*

The ongoing operation of water mains, infrastructure and associated appurtenances serving the DRSP area will be owned and maintained by NCSD.

Table 5.1: DRSP Water Use Factor and Demand

Land Use Category	*Number of Units or Acres*	*Water Use Factor[3] (af/yr)*	*Potable Water Demand (af/yr)*	*Daily Demand[2] (gpd)*
Residential				
Apartments/ Condominiums	173 units	0.13 af/yr/unit	22.14	
Townhomes	210 units	0.14 af/yr/unit	30.24	
Cluster	124 units	0.21 af/yr/unit	25.79	
4,000-5,999 SF	447 units	0.21 af/yr/unit	92.98	
6,000-10,000+ SF	260 units	0.34 af/yr/unit	87.36	
Affordable	75 units	0.14 af/yr/unit	10.80	
		Subtotal:	*269.31*	*240,424*
Commercial[1]				
Village Commercial	4.4 ac	0.17 af/yr/1,000 sf	8.69	
Flex Commercial	17.9 ac	0.17 af/yr/1,000 sf	35.35	
		Subtotal:	*44.04*	*39,316*
Recreation - Daycare[1]				
Recreation – Daycare Facility	0.67 ac	0.13 af/yr/1,000 sf	1.32	1,178
		Subtotal:	*1.32*	*1,178*
Landscape				
Village and Flex Commercial Area and Recreation – Daycare Facility[4]	7.7 ac	1.0 af/yr/ac	7.66	
Recreation	11.0 ac	1.0 af/yr/ac	11.0	
Pocket Parks	12.0 ac	1.0 af/yr/ac	12.0	
Streetscape/Parkways	6.5 ac	1.0 af/yr/ac	6.50	
		Subtotal:	*37.16*	*33,174*
		Project Total:	*351.83 af/yr*	*314,092 gpd*
		Project Total (with 10% contingency):	*387.01 af/yr*	*345,500 gpd*

Notes:
[1] Assumes 0.15 gpd/sf and 33% useable site area for buildings.
[2] Conversion factor: 1 af/yr equals 892.742 gpd.
[3] Water usage factors used in the table above are derived from the following sources: 2016 NCSD Urban Water Management Plan (UWMP), The City of Santa Barbara and the County of SLO were used if there wasn't a direct water usage factor listed in the 2016 UWMP for each land use designation. The water demand usage factors have been reduced by the mandated 20% as described in the 2016 UWMP.
[4] Assumes 33% of total commercial and daycare acreage is available for landscape.

Exhibit 5-1: Proposed Water Backbone Infrastructure

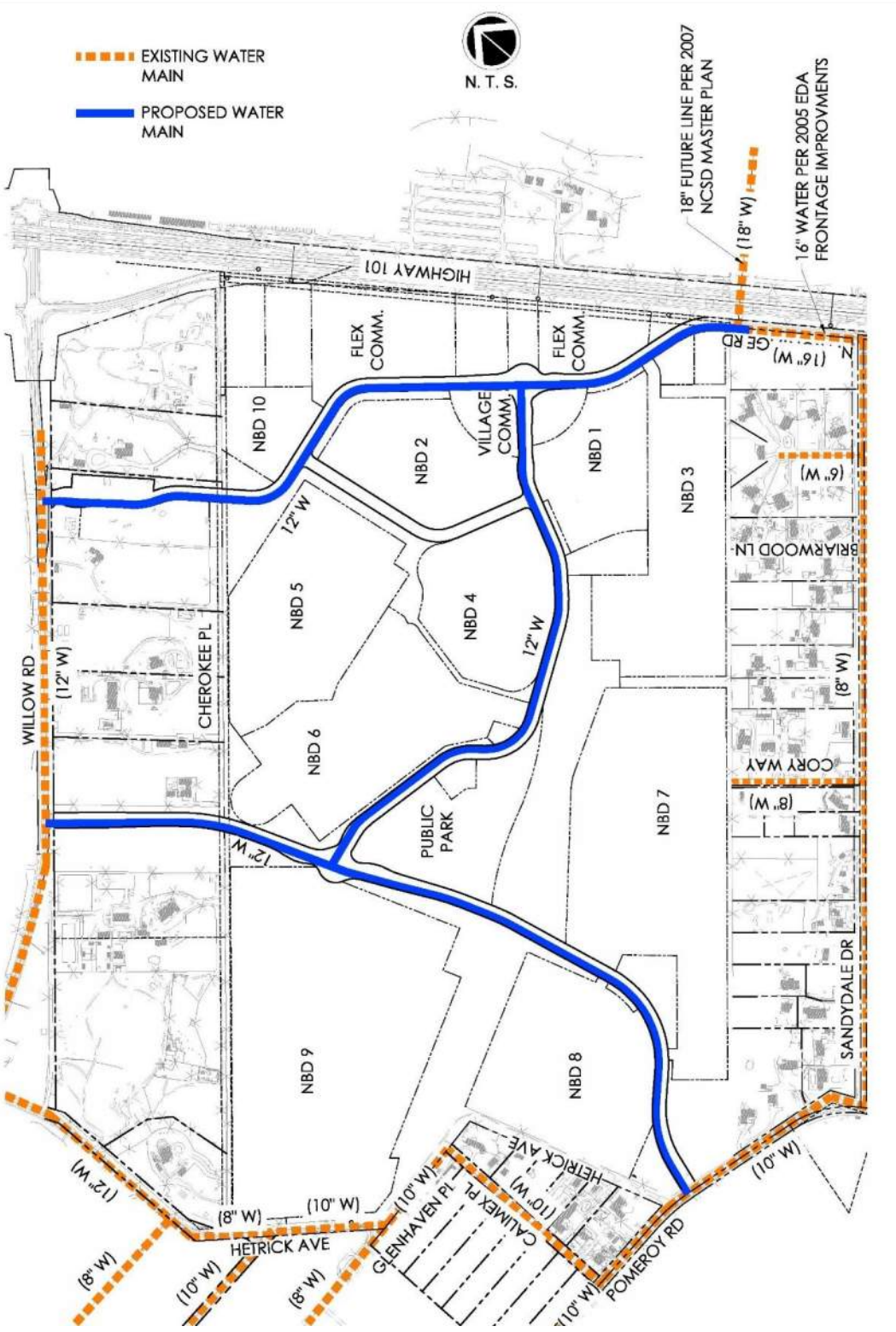
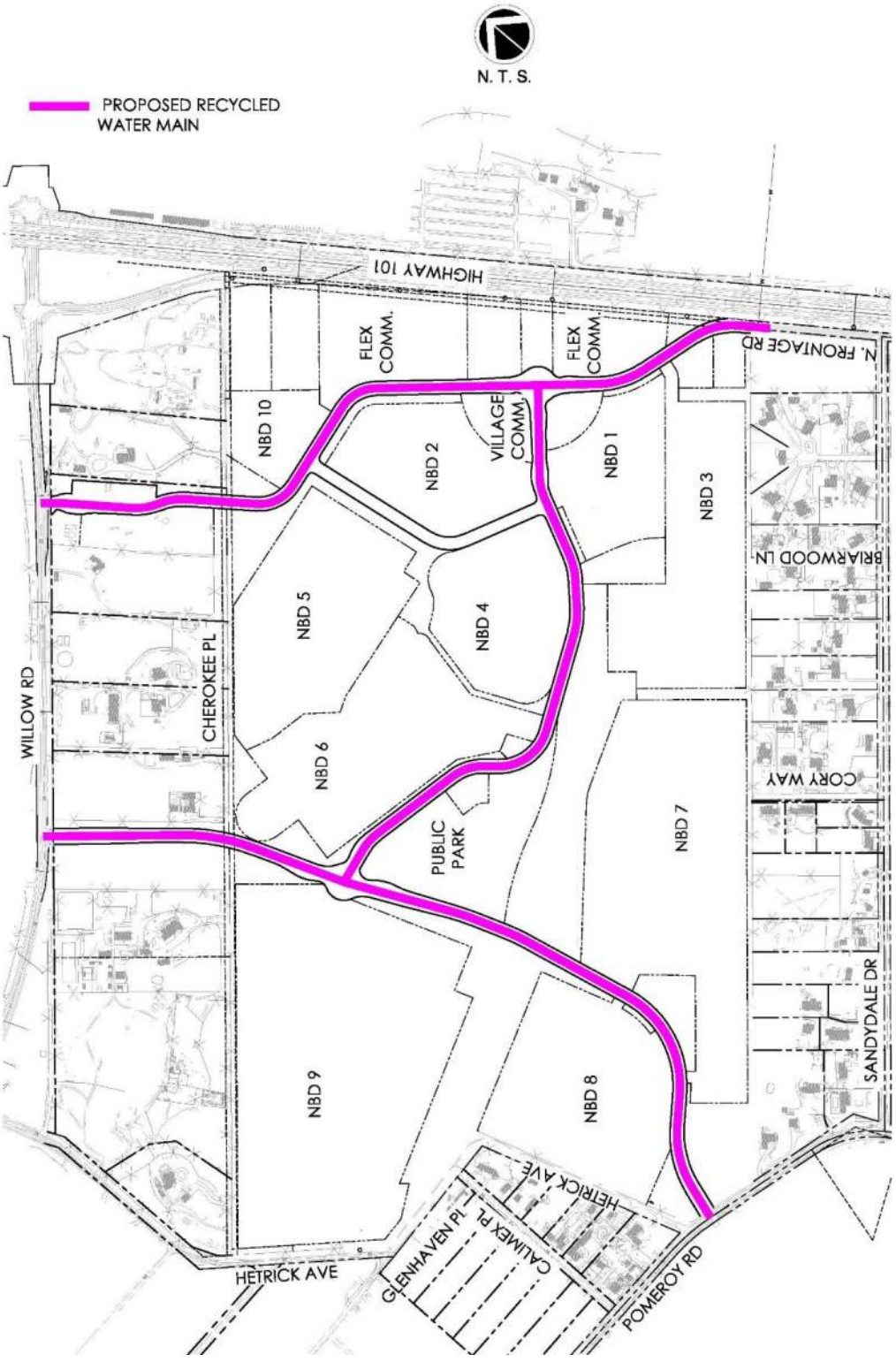


Exhibit 5-2: Recycled Water Infrastructure



5.3 Wastewater

Wastewater generated within the DRSP area will be conveyed to the existing NCSD infrastructure within North Frontage Road. The project will require an extension of the existing 12" gravity line within North Frontage road to provide sewer to the proposed development areas. The wastewater collected from this development will be conveyed to the Southland Wastewater Treatment plant located south of the project site along U.S. Highway 101 on Old Windmill Place. See Exhibit 5-3 for proposed sewer service lines in the DRSP area. The main trunk lines will be owned and operated by NCSD. Buildout of the development would generate an estimated 240.50 acre-feet of wastewater per year based on average flow rates (see Table 5.2). For potential peak water flows, a calculation of 601.25 acre-feet is projected, based on a County peaking factor of 2.5.

Two proposed sewer lift stations will be located on two separate dedicated lots on the west side towards Hetrick Avenue and Pomeroy Road within the DRSP area that will be owned/operated by NCSD. The force main lines and connections back to the gravity sewer backbone will coincide with the neighborhood developments.

5.3.1 *Phasing*

The anticipated phasing for the proposed improvements would consist of connecting to the sewer mainline that is currently approved by the County to be installed with the widening of the Frontage Road. Phasing of the wastewater backbone infrastructure should generally follow the phasing demonstrated in Exhibit 5-6.

5.3.2 *Operation and Maintenance*

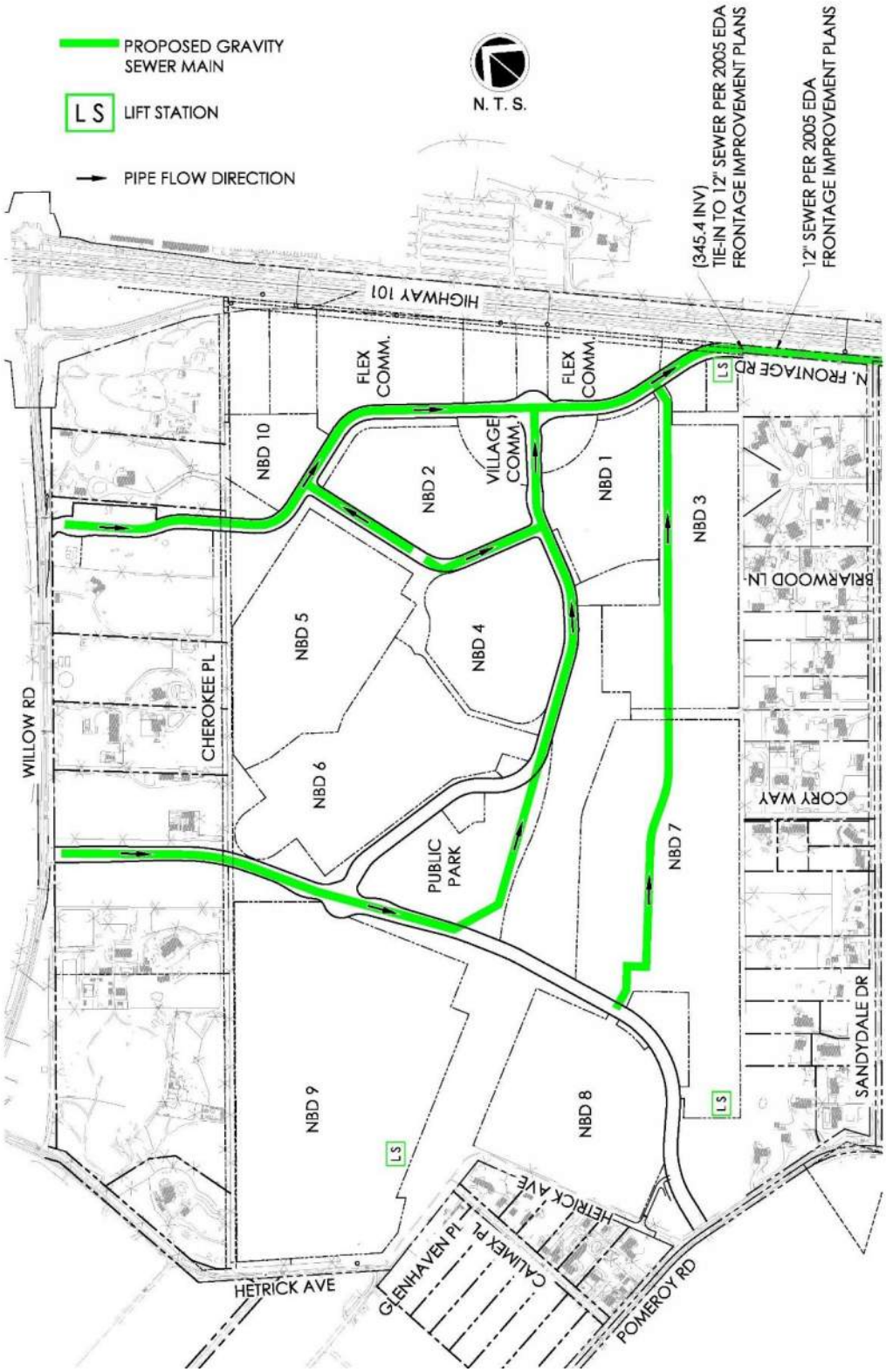
The ongoing operation of gravity sewer mains, manholes, lift stations, force mains, infrastructure and associated appurtenances serving the DRSP area will be maintained by NCSD.

Table 5.2: DRSP Wastewater Generation

Land Use Category	*Number of Units or Acres*	*Wastewater Generation Factor[3,4] (GPD)*	*Annual Demand (af/yr)*	*Daily Demand[2] (gpd)*
Residential				
Apartments/ Condominiums	173 units	103/unit	19.93	
Townhomes	210 units	116/unit	27.21	
Cluster	124 units	167/unit	23.21	
4,000-5,999 SF	447 units	130/unit	65.08	
6,000-10,000+ SF	260 units	180/unit	52.41	
Affordable	75 units	116/unit	9.72	
		Subtotal:	*197.56*	*176,736*
Commercial[1]				
Village Commercial	4.4 ac	100/k-sf	7.16	
Flex Commercial	17.9 ac	100/k-sf	29.11	
		Subtotal:	*36.27*	*32,380*
Recreation - Daycare[1]				
Recreation – Daycare Facility	0.67 ac	100/k-sf	*1.09*	
		Subtotal:	*1.09*	*973*
Landscape				
Recreation	11.0 ac	0.50 af-ft/yr-acre	5.5	
Pocket Parks	12.0 ac	-	-	
Streetscape/Parkways	6.5 ac	-	-	
		Subtotal:	*5.5*	*4,910*
		Project Total Average Flow:	*240.50 af/yr*	*214,999 gpd*
		Project Peak Flow (assumes 2.5 Peaking Factor):	*601.25 af/yr*	*536,761 gpd*

Notes:
[1] Assumes 33% useable site area for buildings.
[2] Conversion factor: 1 af/yr equals 892.742 gpd.
[3] Wastewater flow generation factors for single family are a percentage of average water demand: 60% for 6,000+, 70% for 4,000-6,000, 90% for all others.
[4] Wastewater flow generation factors for commercial: City of San Luis Obispo, Infrastructure Renewal Strategy (Dec. 2015)

Exhibit 5-3: Proposed Sewer Backbone Infrastructure



5.4 Drainage and Storm Water Facilities

5.4.1 Existing Conditions

Per the USDA NRCS Web Soil Survey, the hydrologic soil group for the development area is listed as Type A Soils, Oceano Sand. Per the geotechnical feasibility report prepared by Earth Systems Pacific dated September 2017, the site is well drained and there are high infiltration rates across the site.

Most of the existing terrain across the property is gradually sloped between 2% - 10% with localized mounds and some rolling hills. The average existing slope for the entire property is 5%. Localized low spots and depressions occur throughout the site. An existing hillside, or ridge, that runs from the Hetrick Avenue and the Glenhaven Place intersection to the southeast varies between 10% - 25% slope. Another localized ridge runs north-south from Willow Road to the north and Sandydale Drive to the south.

These localized ridges divide the project into (3) general watershed areas, see in Exhibit 5-4:

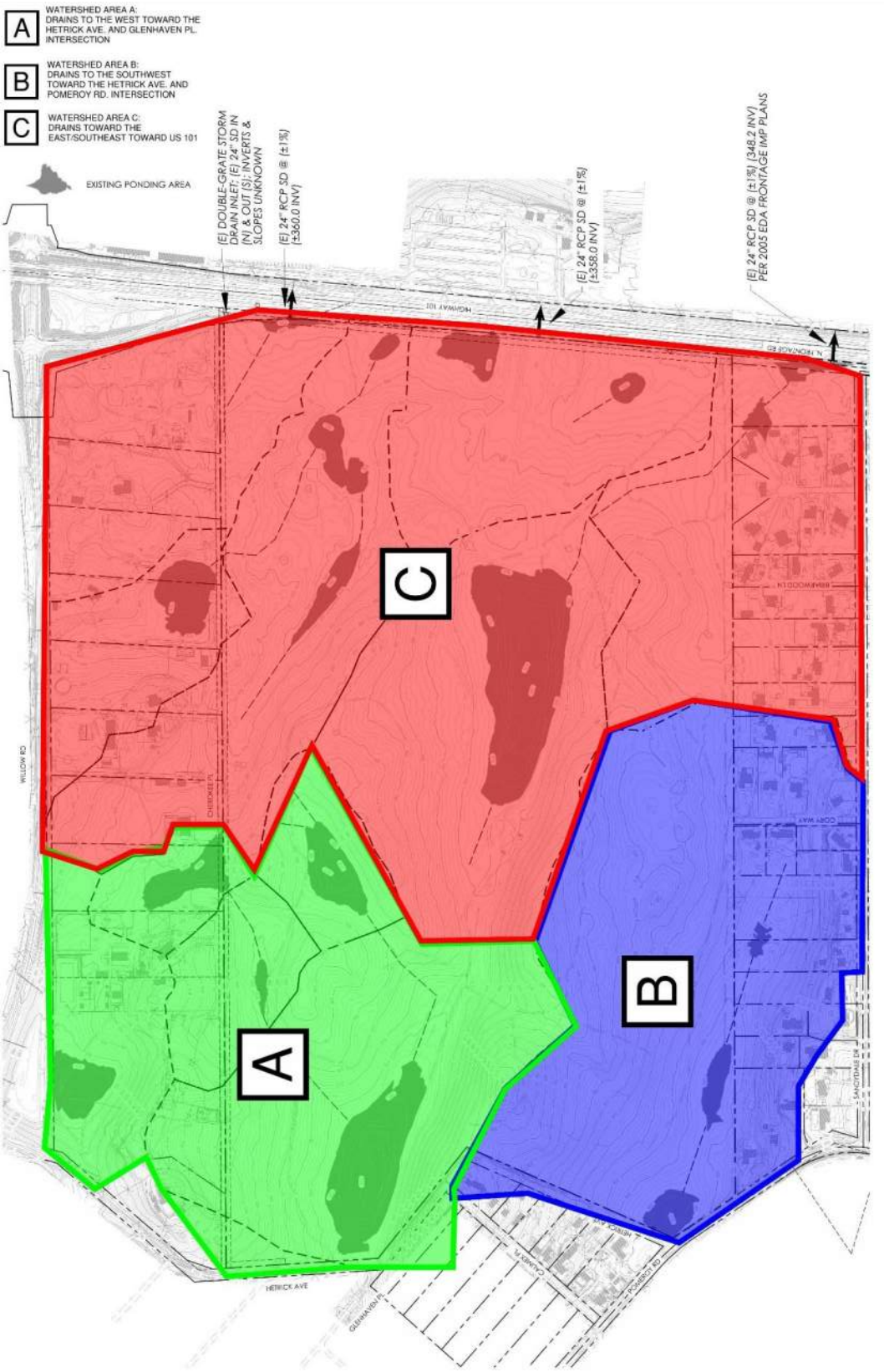
- *Watershed Area A*: the northwest portion of the project drains to the west towards the Hetrick Avenue and Glenhaven Place intersection.
- *Watershed Area B*: the southwest portion of the project drains to the southwest towards the Hetrick Avenue and Pomeroy Road intersection.
- *Watershed Area C*: the east portion of the project drains towards the east/southeast towards U.S. Highway 101.

Some existing off-site areas drain towards and onto the DRSP property as run-on. The associated flows from these areas will be collected in swales and/or storm drain culverts along the perimeter of the DRSP area, conveyed around the proposed neighborhoods and considered as bypass during the development of the project improvements. Drainage should be conveyed in a non-erosive manner so as not to cause damage to downstream properties.

The existing drainage along the east side of U.S. Highway 101 and Nipomo Creek is intended to remain in its current condition with no upgrades, since the County requires all post developed flows to be equal to or less than pre-developed peak flows. This will reduce the amount of anticipated flows that the existing channel will receive during the larger storm events, therefore the channel should not need to be improved form its current state.

See Exhibit 5-4 for the existing topography, localized low spots and depressions, drainage management area (DMA) watersheds and existing storm drain culverts.

Exhibit 5-4: Existing Drainage Watershed Areas



5.4.2 Proposed Construction and Post-Construction Conditions

The DRSP area post-developed conditions will mimic pre-developed conditions to the greatest extent practicable. Runoff from the identified watershed areas, or drainage management area (DMA), will be directed in the same general direction as the existing site conditions. Proposed storm drain facilities will be designed to meet both the County of San Luis Obispo traditional flooding requirements as well as the Central Coast Regional Water Quality Control Board post-construction stormwater requirements.

Proposed backbone road sections, identified as Collectors A, B, and C, include roadside low-impact development (LID) areas to treat and mitigate runoff from roadway impervious areas. Two curb types have been proposed along these backbone collector roads to allow for runoff to sheet flow into roadside LID areas. Curb types will either be flush curbs, or mow curbs, that allow runoff to sheet flow into the LID areas or traditional concrete curb and gutters that will collect and convey runoff to curb cuts to the LID areas. Perforated storm drain culverts may be added as underdrains as necessary. Inlets and/or catch basins will be integrated for larger storm event overflow. Storm drain inlets/culverts will be added and spaced appropriately to collect and convey large storm event overflow runoff towards proposed, downstream basins.

Examples of parkway/LID and curb cuts applications allowing for water infiltration.

Each development area will also design and incorporate its own stormwater mitigation measures within the individual the DRSP neighborhoods and commercial areas. Stormwater mitigation measures examples are found in Appendix A – Design Guidelines. Neighborhood and internal road sections have been designed to also include roadside LID areas to treat and mitigate runoff. Inlets and/or catch basins will also be integrated within these areas for larger storm event overflow. Storm drain inlets/ culverts will be added and spaced appropriately to collect and convey large storm event overflow runoff towards proposed, downstream basins.

As shown in Exhibit 5-5, four (4) decentralized, eight-foot maximum ponded depth stormwater basins are proposed at the northeast, southwest, and west/northwest corners of the DRSP area. In addition, multiple, shallow, 2-foot maximum ponded depth (includes freeboard as shown on County of San Luis Obispo Detail D-1A) stormwater basins are proposed throughout the eastern half of the project. All stormwater basins will be designed to meet the County of San Luis Obispo Public

Improvement standards. Each sub-system of basins will be sized to accommodate the remaining runoff produced by the additional impervious areas within each respective DMA and neighborhood development. Storm drain inlets/culverts will also be added to connect sub-systems of basins where appropriate. Overflow structures, culverts, weirs, or other devices will be added and sized to meet discharge flows for both the County of San Luis Obispo requirements as well as the Central Coast Regional Water Quality Control Board post-construction stormwater requirements.

5.4.3 Stormwater Mitigation

Proposed stormwater mitigation will be designed so post-developed peak run-off flows are equal to or less than pre-development peak flows. The design intent is to not increase peak flows that ultimately goes to the three (3) existing 24-inch reinforced concrete storm drain culverts that travel underneath U.S. Highway 101.

Storm water runoff quality will be addressed for both construction and post-construction phases of the DRSP. Temporary sediment control during construction will be implemented during construction and a Stormwater Pollution Prevention Plan (SWPPP) will be prepared for each grading project over one (1) acre in area of ground disturbance in accordance the State Water Resources Control Board (SWRCB) requirements. Construction phase impacts will be addressed by the implementation of Best Management Practices (BMPs). Operations and maintenance will be carried out by the developer's contractor during construction and will be responsible for implementing BMPs established in the County Code.

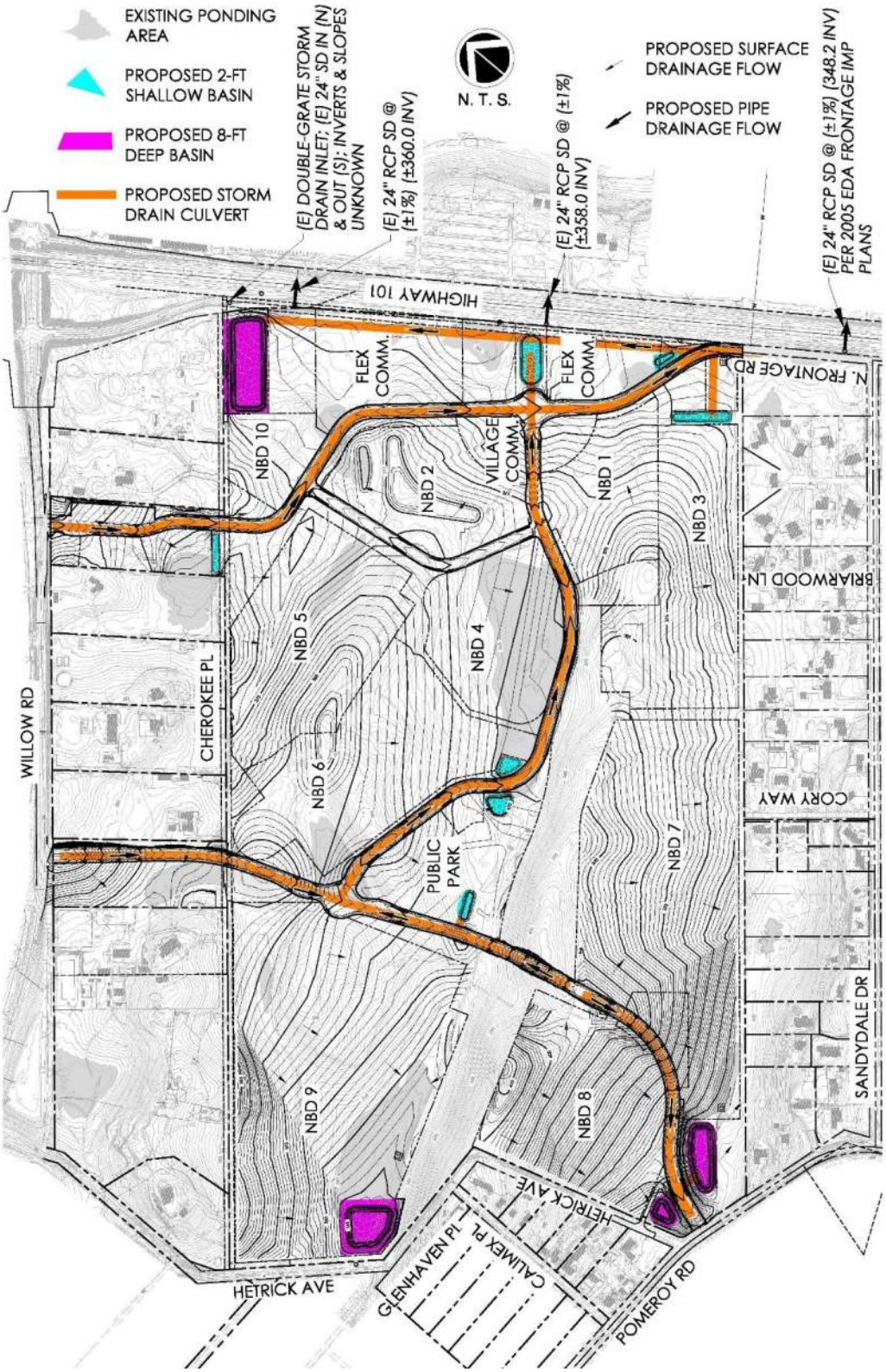
See Exhibit 5-5 for the master site plan overlaid with backbone storm drain trunk lines and proposed deep and shallow basin locations.

5.4.4 Operations and Maintenance

The operations and maintenance for all drainage and stormwater facilities outside County maintained roadways beyond curb face will be conducted by the Homeowners Association or special district and the agreement will follow the county's private stormwater system operation and maintenance template SWP- 2002c.

Example of stormwater basin.

Exhibit 5-5: Proposed Drainage Conditions



5.5 Grading

The Grading of the DRSP area is anticipated to occur in several phases, with grading occurring in sequential construction. The timing, approval, and process of rough grading will comply with Section 2.1.3 of the County's 2019 Public Improvement Standards. The property will first be graded to support the installation of backbone road and utility infrastructure. The backbone roads subgrade will be prepared to allow circulation and construction access to the DRSP area. The adjacent commercial and multi-family designated land use areas as well as the residential neighborhood areas will be graded as necessary with the backbone roads effort in order to balance earthwork operations on-site to the greatest extent practicable. Prior to the commencement of grading operations, areas on-site that contain existing vegetation, oak trees, and/or other sensitive areas that are to remain as part of the development will be delineated with flags and/or protection fencing to ensure they are clearly identifiable.

Proposed stormwater basins in their respective areas of the property will be rough graded to create the basin shape, bottom, and top bench. Relatively flat sloped areas will be created for each adjacent commercial and multi-family areas as well as in the residential neighborhoods in order to direct storm water runoff to these proposed basins. As part of the subdivision plans, a comprehensive drainage plan should be prepared to demonstrate storm water runoff is conveyed in a non-erosive manner in accordance with County Public Improvement standards.

The owner, project team, contractors, and Qualified SWPPP Practitioner (QSP) for the property will determine the frequency and location of temporary measures. Grading-associated components will be temporary in nature and would be maintained until the permanent improvements are constructed.

5.5.1 Maintenance

Maintenance measures during grading activities will be subject to County standards and established Best Management Practices per County Code. Additionally, stockpile maintenance and storage will adhere to the County Code.

5.5.2 Retaining Walls

As determined by the County Code, retaining walls are exempt from a grading permit if deemed applicable to qualify for an exemption. Otherwise, retaining wall heights and setbacks will be subject to the standards set forth in the County Building Code.

5.6 Dry Utilities

The applicant or their appropriate representative shall provide a will-serve letter from the power and telephone providers for the DRSP area, including the following dry utilities: telecommunications, cable/data service, electric, and natural gas, as further described below. All dry utilities will be undergrounded.

5.6.1 *Telecommunications*

The American Telephone and Telegraph Company (AT&T), Pac-West Telecomm Inc., and Satin Satellite are the primary telecommunications service providers to the community of Nipomo and will provide service to the DRSP area. These private companies will extend their facilities into the DRSP area within the designated public utility easements (PUE), as identified on the street sections within Chapter 4, as it develops. All new telecommunications lines within the DRSP area will be placed underground.

High speed fiber infrastructure within the vicinity of the DRSP area is limited to non-existent. However, due to current market demands, high speed fiber infrastructure may be provided within the DRSP area to allow the community to hook into future high-speed fiber infrastructure should it be extended to the property.

5.6.2 *Cable Service*

Cable television for the Nipomo area is provided by Charter Communications. The expanding range of broadcast services, including satellite, may be available for the DRSP area to the extent they are available throughout San Luis Obispo County.

5.6.3 *Electric*

Pacific Gas & Electric (PG&E) will provide electricity distribution to the DRSP area. Existing overhead service lines run along Cherokee Place, Pomeroy Road, and the eastern edge of the property. New service lines will be placed in or adjacent to the right-of way of the proposed commercial and residential roadways. All new electric lines will be placed underground.

Residential neighborhoods within the DRSP area will be designed to accommodate installation of solar panels on rooftops per the County's Building Code. Installation of solar on all residential homes will aide in generating needed electricity on-site and minimize the overall environmental impact by the community.

5.6.4 *Natural Gas*

SoCalGas will provide natural gas distribution to the DRSP area. There are no existing gas mains located within the DRSP area. To support the proposed commercial and residential areas, new gas mains may be constructed as part of the primary backbone roadways to serve new development areas.

5.7 Infrastructure Easements

5.7.1 North Frontage Road

Based on the conditions of the property located at the southeast corner of the DRSP area, an easement may be needed to accommodate the extension of infrastructure along North Frontage

Road to the DRSP property. As part of the DRSP, North Frontage Road will be extended through the project to Willow Road. Refer to Section 4.3 for additional information regarding the North Frontage Road (Collector A) extension.

5.7.2 Hetrick Avenue

Hetrick Avenue traverses the western boundary of the DRSP property. The Nipomo Community Plan, the South County Circulation Study, and the South County Area Inland Plan identify improvements to Hetrick Avenue, designating the roadway a two-lane rural road classification with Class II bike lanes, ultimately extending from Pomeroy Road north to Aden Way. The extension of Hetrick Avenue from Glenhaven Place to Pomeroy Road in the south is currently unimproved. The improvements within the DRSP do not include the construction of the Hetrick Avenue extension. The DRSP will construct Collector 'B' which travels from Pomeroy Road through the property and connects with Willow Road to the north, as a more functional alternative which avoids traffic safety concerns at the intersection with Pomeroy Road. Currently at the southwest corner of the DRSP, Hetrick Avenue is an existing driveway, with a 30-ft right-of-way, which would be abandoned, rerouted to Collector 'B' or deeded to the adjacent existing residential property owners to the west.

In order to allow for emergency access, an easement will be provided from the existing portion of Hetrick Avenue at the northwest corner of the DRSP, connecting to Neighborhood 9. This emergency access point is intended to be used only by fire and safety vehicles, pedestrians, bicycles, and equestrians.

5.7.3 Cory Way

Cory Way currently dead ends into the southern property line of the DRSP. In order to allow for emergency access to the community, an easement will be provided at this location connecting to Cory Way. This emergency access point is intended to be used only by fire and safety vehicles, pedestrians, bicycles, and equestrians. An easement may be needed to accommodate access.

5.7.4 Southern California Gas

An existing 20-ft Southern California Gas (SoCalGas) easement is located directly adjacent to the U.S. Highway 101 right-of-way on the DRSP property. This easement will include mutually agreed upon landscaping and will remain clear of obstructions to allow for any necessary or ongoing maintenance by SoCalGas.

5.7.5 Pomeroy Road

Based on the final alignment of the Pomeroy Road realignment into the DRSP, an easement(s) may be needed to accommodate proposed roadway and circulation improvements.

5.8 Phasing

Exhibit 5-6 identifies the areas anticipated in the conceptual phasing to make up the DRSP development phases. These phases address goals to accommodate orderly development and provision of services. They represent a reasonable approach to extending services and infrastructure throughout the DRSP. In some cases, property owners may wish to develop in phases concurrently or in a different order than anticipated in Exhibit 5-6. This will be permitted provided all public improvements needed to support proposed development are completed, and that circulation is provided for secondary access. For a more detailed breakdown of proposed phasing for the DRSP, refer to Appendix B – Phasing Matrix.

Exhibit 5-6: Proposed Conceptual Phasing

6 Public Services

6.1 Introduction

The DRSP is served by several public services including schools, police and fire/emergency/ ambulance service protection, solid waste disposal, recycling, green waste, postal service, and library services as discussed in more detail below.

6.2 Schools

Public education for the DRSP will be provided by Lucia Mar Unified School District (LMUSD), which includes elementary, middle, comprehensive high school, continuation high school, and adult education. The DRSP falls in the boundary area for the Lange Elementary School, Mesa Middle School, Central Coast New Tech High School, and Nipomo High School.

Nipomo High School outdoor common green and courtyard.

It is anticipated that the DRSP would increase demand for public school services at existing LMUSD facilities. Published LMUSD enrollment rates for 2017-18 combined with the District's Facilities Master Plan (2014) portrays existing capacity for Lange Elementary at 85%, Mesa Middle School at 88%, and Nipomo High School at 91%, as shown in Table 6.1 below.

Table 6.1: Existing LMUSD School Capacity

School	*2017/18 Student Enrollments*[1]	*2021/22 Student Projections*[2]	*Planned Capacity*[2]	*Current Available Capacity*
Lange Elementary	585	608	687	102
Mesa Middle	545	535	618	73
Nipomo High	970	1,172	1,071	101

Sources:

[1] 2018 School Plans for Student Achievement

[2] 2015/2016 LMUSD FM

Table 6.2 below identifies the anticipated number of school-age children generated by the DRSP and is based on the California Statewide Average Student Generation Rates.

Table 6.2: Student Generation

Grade Level	*Generation Rates*	*Homes*	*Additional Students*
Elementary (K-6)	0.5[1]	1,289	645
Middle (7-8)	0.2[1]	1,289	258
High (9-12)	0.2[1]	1,289	258
		Total (K-12):	*1,161*

Sources:
[1] Statewide Average Generation Rate

New students will be added to the existing LMUSD system over the build-out of the DRSP, which will occur over several phases for a period of several years. These phases are shown in sequence below; however, are not intended to occur in any particular sequence, with the exception of Phase 1, which will be the first phase of development. Table 6.3 below portrays the anticipated number of new students generated by phases of development, as noted in Chapter 5, Figure 5-6: Proposed Conceptual Phasing.

Table 6.3: Anticipated Student Generation Rate by DRSP Phasing

Phase	*Elementary (K-6)*	*Middle (7-8)*	*High (9-12)*	*Total Student Generation*
Phase 1	343	137	137	617
Phase 2	209	84	84	377
Phase 3	93	37	37	167
			Total:	*1,161*

Note: This sequence is for illustrative purposes only. Implementation may not occur in this sequence.

As mandated by State law, developer impact fees will be paid to LMUSD as the DRSP area is built out over time to accommodate the anticipated increase in demand for public school facilities.

6.3 Police

Police services for the DRSP will be provided by the County of San Luis Obispo and will be based out of the San Luis Obispo County Sheriff Department offices located at 1681 Front Street in Oceano; the California Highway Patrol also assists in area calls for service. The Sheriff's Department divides the County into three areas – North Station, Coast Station, and South Station. Each of these is large in geographic area and may lead to delays in response times. Under the County's FY 2017-18 to 2021-2022 Infrastructure and Facilities Capital Improvement Plan, a new 6,000 square foot South County Substation is to be constructed in the Nipomo area to provide more timely service to the community. It is anticipated that this new substation facility will also enable more prompt service to the DRSP area.

Developer impact fees will be paid to the County Sheriff's Department to accommodate new demand for police services as the DRSP area is built out over time.

Public services, including police and fire stations.

6.4 Fire and Emergency Services

The San Luis Obispo County Fire Department and the California Department of Forestry and Fire Protection (CDF) will provide fire protection services to the DRSP area. Development will be primarily served by Fire Station No. 20, located off of North Oakglen Avenue at 450 Pioneer Avenue in Nipomo, approximately one-half mile away from the southern edge of the DRSP area. The Department also deploys resources from other nearby stations and personnel, such as Fire Station No. 22 located at 2391 Willow Road in Arroyo Grande, to maintain adequate response times. The County's FY 2017-18 to 2021-2022 Infrastructure and Facilities Capital Improvement Plan identifies that a new property in the West Nipomo area will be acquired to develop a new fire station to serve the community. It is anticipated that the County's current levels of fire services are sufficient to serve the DRSP area.

Fire truck and engines.

The San Luis Obispo County Fire Department and the CDF provide emergency paramedic services from both Fire Station No. 20 and No. 22. These stations have designated Medic Engines, which are staffed by a Fire Captain and a Fire Apparatus Engineer, which maintains a licensed paramedic on staff. However, the County also contracts with San Luis Ambulance to provide paramedic services throughout the County. Ambulances are dispatched via radio through the San Luis Obispo County's Sheriff Dispatch Center and respond to emergency, non-emergency, and Critical Care Transport calls. San Luis Ambulance maintains a location in Nipomo, located at 720 South

Frontage Road, with response times to the project site generally just over 5 minutes. Each ambulance is staffed with a minimum of one Paramedic and one Emergency Medical Technician.

County Fire and CDF designate the existing DRSP area within the High Hazard Fire Severity Zone. As the DRSP is built-out over time, the level of fire severity is expected to be reduced and transition to one focused on structural defense. However, the DRSP plans to maintain the existing oak woodland "spine" as a central community feature. To ensure adequate defensible space around planned structures abutting or adjacent to this oak woodland "spine", a vegetation management plan and/or fire safety plan(s) will be prepared to ensure structures are adequately protected while also providing County Fire and CDF with enough room to maneuver and defend structures, as needed. Additional measures to ensure adequate vegetation management and thus fire protection within the DRSP are discussed in Chapter 3.

Developer impact fees will be paid to the County Fire Department and CDF to accommodate new demand for fire as the DRSP area is built out over time.

6.5 Solid Waste, Recycling, and Green Waste

Solid waste, recycling, and green waste generated by the new development will be serviced by the South County Sanitary Services. The solid waste, recycling, and green waste will be disposed of at the Cold Canyon Landfill. Based on current disposal rates, this facility has a capacity to accept solid waste until at least the year 2040. South County Sanitary Services has reviewed the conceptual plans and will provide solid waste, recycling, and green waste pick-up service to the DRSP area.

6.6 Postal Service

Postal Service for the DRSP area will be provided by the United States Postal Service (USPS) from their location at 706 West Tefft Street. The location of and type of mailbox required for each land use within the DRSP will be based upon and adhere to requirements outlined in the USPS National Delivery Planning Standards: A Guide for Builders and Developers and the Delivery Growth Management Program. Below is a discussion of the mailbox locations envisioned for each area within the DRSP, each of which will be ultimately approved by the USPS prior to construction.

For each single-family residential neighborhood and commercial within the DRSP area, a centralized delivery location will be provided. The specific location and equipment type will adhere to the USPS requirements for both USPS and customers related to access, locks, safety, accessibility, placement, and specific Americans with Disabilities Act (ADA) requirements. In specifically considering the single-family residential neighborhoods, the centralized delivery locations will be within the individual neighborhood parks.


Examples of mailbox enclosures for individual residences and multifamily neighborhoods.

For each multi-family residential community within the DRSP area, a centralized mailbox location, whether internal or external, will be provided for each of the multi-family residential communities. The centralized mailbox equipment will be approved by USPS and will meet the minimum 1:10 parcel locker/mailbox requirement. If located exterior to a building, a canopy will be provided to provide protection from weather and provide adequate nighttime lighting, per USPS requirements.

6.7 Library

Library services for the DRSP area will be provided by the existing Nipomo Library, located at 918 West Tefft Street in Nipomo. The library features a wide variety of book titles such as children, adult fiction and non-fiction, teen collection, and audiobooks as well as DVD's and music. Twelve computers, free public WIFI internet access, and a public meeting room are also provided for use by the public.

Developer impact fees will be paid to the County Public Library to accommodate new demand for library facilities as the DRSP area is built out over time.

Example of library computer desk stations.

6.8 General Government Services

Since the property lies within the unincorporated area of the County of San Luis Obispo, the DRSP area will be serviced by the County's government services, which includes, but is not limited to: administration, planning, voting, courts, environmental/public health, public works, etc.

7 Implementation and Administration

This Chapter describes the DRSP authority, development review process, and administrative procedures controlling the DRSP adjustments and amendments, as well as outlines the intended phasing plan and the proposed construction/maintenance of improvements.

The DRSP provides County review authorities the tools and guidelines to review and approve the DRSP area development proposals. Implementation shall be administered by County review authorities and ensure consistency with the DRSP document.

7.1 Specific Plan Authority and Adoption

Specific plans must comply with California Government Code Sections 65450 through 65457. These provisions require that a specific plan be consistent with the adopted General Plan for the jurisdiction in which the specific plan area is located. In turn, all subsequent development proposals, such as tentative subdivision maps, site plans, improvement plans, and all public works projects, must be consistent with the adopted specific plan.

Pursuant to California Government Code Section 65453, a specific plan may be adopted by resolution or by ordinance. Past County practice has been to adopt a specific plan and certify the Final Environmental Impact Report (FEIR) concurrently through resolution. Customized land use designations are provided to implement the land uses identified in Chapter 2. Land use designations included herein supersede the County's land use ordinance (Title 22) except where the DRSP is silent. In such cases, the existing County land use category standards shall apply.

7.2 Development Agreement

A development agreement is a planning tool that allows public agencies greater latitude to advance local planning policies in sometimes new and creative ways. A development agreement is commonly used in conjunction with specific plan projects. A Development Agreement is anticipated for the DRSP.

Neither the applicant nor the public agency is required to enter into a development agreement as part of project proposal. When a development agreement is entered into, the allowable land uses, required infrastructure and its financing, as well as other terms and conditions of approval are negotiated between the parties involved, subject to the public agencies' ultimate approval.

7.3 Environmental Review

The DRSP addresses land uses, densities, and types of development proposed, as well as streets and infrastructure anticipated to serve the area. It provides a detailed description of the project that was evaluated in the Final Project Environmental Impact Report (FEIR) for the DRSP. Under the California Environmental Quality Act (CEQA), the FEIR has assessed the potential direct and indirect environmental effects associated with the land use program described in the DRSP.

Although the EIR is a separate document, the environmental review process has been an integral component of the planning process to ensure that the DRSP minimizes environmental impacts. The EIR addresses the development of the DRSP as a single project which is projected to be developed in increments over a period of several years. This approach enables the County to comprehensively evaluate the cumulative impacts of the DRSP and consider alternatives and mitigation measures prior to adoption of the DRSP.

Development within the DRSP area shall comply with all conditions of approval and mitigation measures identified in the certified Specific Plan EIR (The Dana Reserve Specific Plan EIR SCH No. ###) and any subsequent CEQA document (e.g., Addendum, Mitigated Negative Declaration, Subsequent EIR, or Supplemental EIR). The DRSP FEIR is intended to expedite the processing of future projects that are consistent with the DRSP. If, when considering subsequent development proposals, the County determines that the proposed development will not result in new effects or require additional mitigation, the County can approve the project without additional environmental review (California Government Code Section 65457 and CEQA Guidelines Section 15182). However, if there are significant changes proposed to the approved DRSP that the County concludes may result in new impacts, any additional environmental review need focus only on those specific areas or topics affected by the change.

7.4 Annexation

The DRSP is currently under County jurisdiction but is located immediately adjacent to the Nipomo Urban Reserve Line (URL). The property is designated in the County's General Plan as a specific plan area, which is subject to preparation of a specific plan to accommodate development proposals and address pertinent issues (refer to Chapter 1). The General Plan requires that a specific plan for the property be adopted prior to annexation of the DRSP area to the URL. The DRSP area is identified within the NCSD's Future District Service Boundary area.

Along with processing of the FEIR and other County entitlements, the Board of Supervisors will adopt a resolution to initiate the annexation of the DRSP property into the URL. Following Board of Supervisor action of project entitlements including adoption of the DRSP and certification of the FEIR, the project will be submitted by NCSD to the Local Agency Formation Commission (LAFCO) for the formal annexation review process. LAFCO works with the County to ensure that a proper plan of services is in place to guide orderly development of the annexed property.

7.5 Development Review Process

Land Use Boundaries and Subdivisions

The DRSP area is currently designated Residential Rural on the County's Land Use Category Map – South County Rural Area. With adoption of the Specific Plan, the County's Land Use Element will be amended to create a new land use category, "Dana Reserve Specific Plan (DRSP)," for the subject property. Future development within the DRSP land use category shall correspond with the eight (8) Land Uses identified in Exhibit 2-1 and the development standards, allowable uses, and all other related requirements identified in Chapter 2. In instances where the DRSP is silent on a particular topic or requirement, development will instead be subject to the requirements of the County's Land Use Ordinance, Title 22 of the County Code, for the most closely related land use category. For example, for development in the DR-SF 1 and DR-SF 2 land uses, the requirements of the RSF Land Use Category in Title 22 will apply when the DRSP is silent on a topic.

The precise location of streets, utilities, and boundaries of development sites will be determined upon approval of tentative subdivision maps. Along with the review of the final map before recording, subdivision improvement plans will be reviewed and approved, which show compliance with the DRSP, EIR, and any associated project conditions of approval.

For the Multi-Family and Commercial land uses, a minor use permit shall be obtained consistent with the existing County process outlined in the Land Use Ordinance. Applications shall be processed in accordance with Section 22.62.050, except compliance with the County Design Guidelines and setback standards shall be in accordance with this Specific Plan.

Processing, Uses, and Plan Interpretation

Conditional Use Permits

A conditional use permit will be required in conjunction with the Oak Woodland Management Plan.

Building Permits

The County building permit process of plan-check, inspection, and occupancy release will typically be the final and most detailed step in County review of private site development. Impact fees are due at the time building permits are issued or as may be described in the development agreement. If required, Inclusionary housing fees will be required to pay at time of building permits.

7.6 Construction and Maintenance of Required Improvements

Public facilities required to serve the DRSP area will be funded as discussed in Chapter 8. Property in the DRSP area that is annexed into the URL will receive the same public services as other neighborhoods in the community, including school, police, fire, public park, and collector road maintenance. Once facilities to serve the DRSP are constructed, a Homeowners Association will be established to operate and maintain facilities, such as parkways, trails and open space, and stormwater facilities. Facilities located within individual residential neighborhoods, such as pocket parks, parkways, stormwater facilities, and local roads, will also be privately maintained by a Homeowners Association. Collector Roads A, B, C, and the public neighborhood park will be maintained by the County.

7.7 Interpretations, Adjustments, and Amendments to the Specific Plan

Interpretations

In instances where the DRSP may not be clear or completely articulate a particular topic related to plan implementation, the Director of San Luis Obispo County Planning and Building or his/her designee may provide an interpretation based on whether the item in question is in keeping with the vision and intent of the DRSP.

Adjustments in Project Phasing

Project features may be advanced to an earlier phase provided all required infrastructure is in place, all necessary mitigation measures are completed or will be completed with project, and the action will not significantly defer a project feature that is anticipated in a preceding phase. The determination to advance a project feature shall be made by the Director of San Luis Obispo County Planning and Building or his/her designee.

Amendments

California Government Code Section 65453 et. Seq. provides that a Specific Plan "may be amended as often as deemed necessary by the legislative body". Amendments to this plan may be initiated by a developer, any individual property owner, or by the County, in accordance with duly adopted County procedures governing the adoption and amendment of the Specific Plan. Applications for amendments shall be submitted to the County Department of Planning and Building for processing.

Necessary Findings

A. Changes have occurred in the community since the approval of the Specific Plan which warrant the proposed amendment.

B. The proposed amendment is consistent with the San Luis Obispo County General Plan.

C. The proposed amendment may enable efficient and less costly delivery of necessary services and public facilities to the population within the area of this Specific Plan and the Nipomo Mesa.

8 Financing

This Chapter describes the financing mechanisms available for the ongoing maintenance of public and private improvements required for the DRSP. Upon preparation of a DRSP master maintenance plan, it is anticipated that one or more financing mechanisms will be used to provide for the ongoing maintenance of private and public improvements. California law provides for the establishment of a variety of financing mechanisms for maintaining public facilities, including, but not limited to, Landscape Maintenance Districts ("LMD"), County Service Areas ("CSA"), Community Facilities Districts ("CFD" and together with the LMD and CSA, "Public Financing District"). Privately owned common facilities are typically maintained by a Homeowners' Associations ("HOA"). Public Financing Districts are established by a public agency, while an HOA is established by a private entity in compliance with standards established by the California Bureau of Real Estate. It is anticipated the maintenance of DRSP improvements (e.g., landscaping, park, drainage, trails, open space, street lights, etc.) will be maintained and funded by a combination of a Public Financing District and one or more HOA. The sewer and water improvements are anticipated to be owned, operated, and maintained by the Nipomo Community Services District, provided annexation occurs.

8.1 Financing Principles and Policies

It is the objective of the DRSP to have a neutral fiscal impact on the County and other public agencies maintaining project facilities. The financing mechanisms to be established for the DRSP shall consider the following:

- Parties benefiting from the improvements;
- Security for the funding of the ongoing maintenance;
- Establishment of sufficient reserve funds for repairs and replacements;
- Flexibility for changes in annual maintenance costs;
- Interest of future residents paying annual assessments;
- Equity among contributing property owners; and
- Transparency regarding the costs of maintenance services and improvements being funded.

8.2 Public Financing Districts

The establishment of a Public Financing District generally requires:

(i) A landowner to submit a petition requesting a public agency to establish a specific Public Financing District,

(ii) Identifying the facilities to maintained and corresponding estimated maintenance costs,

(iii) The public agency establishing the proposed annual assessments or special taxes to fund the maintenance of the requested improvements pursuant to an engineer's report or similar document, and

(iv) The landowner voting in favor of the formation of the Public Financing District and the levy of such assessments or special taxes.

Upon a successful landowner vote, the public agency then has authority to levy the assessments on the property as authorized to fund annual maintenance costs. Although different types of Public Financing Districts can maintain many of the same improvements, the legislative provisions for establishing each type and the related requirements of each are different. For example, the assessments levied on each parcel of property for improvements maintained with an LMD need to be based on the special benefit received by such parcels of property, while a CFD special tax is based on a general benefit requirement. Many public agencies have determined the "general benefit" requirements of the CFD make it a more favorable financing mechanism and less likely to be challenged or repealed under the provisions of Proposition 218.

Appendix A - Design Guidelines

The purpose of these design guidelines is to ensure future development is consistent with the vision and character of the Dana Reserve Specific Plan (DRSP) project. It is also intended to provide direction for subdividers, architects, and designers when preparing development plans, and governmental review bodies with direction for project evaluation as future applications come forward.

1.1 Residential Design Guidelines

The following design guidelines apply to residential development within the DRSP. They are general in nature, however a number are land use specific and are noted as such herein.

1.1.A Architectural Styles

The architectural character for the DRSP is intended to be representative of the history of the property as well as architectural styles typically found within the Nipomo area. A list of permitted architectural styles appropriate for residential land uses has been provided. Refer to Exhibits 1-1 through 1-3 for typical style elements.

Single-Family

A.1 Architectural styles for single-family residential land uses within Dana Reserve shall be Agrarian, California Ranch, or Spanish.

A.2 Individual single-family neighborhoods shall be designed with a one primary style and a balanced mix of the other two architectural styles.

A.3 Residential elevations within the single-family land uses should not be repeated more frequently than every fourth house. This variation may be achieved by not repeating both a color scheme and an elevation style.

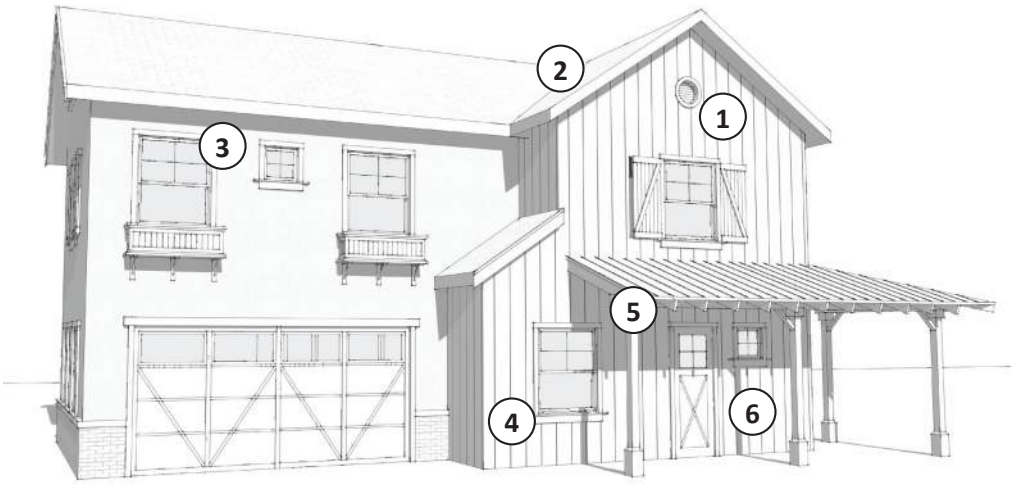
A.4 Single-family residential land uses may be one- or two-stories, or a combination of both.

Multi-Family

A.5 Architectural styles for multi-family residential land uses within Dana Reserve shall be Agrarian, California Ranch, or Spanish.

A.6 The multi-family neighborhoods shall be designed uniformly with one of the allowed architectural styles.

Exhibit 1-1: Agrarian Architectural Character

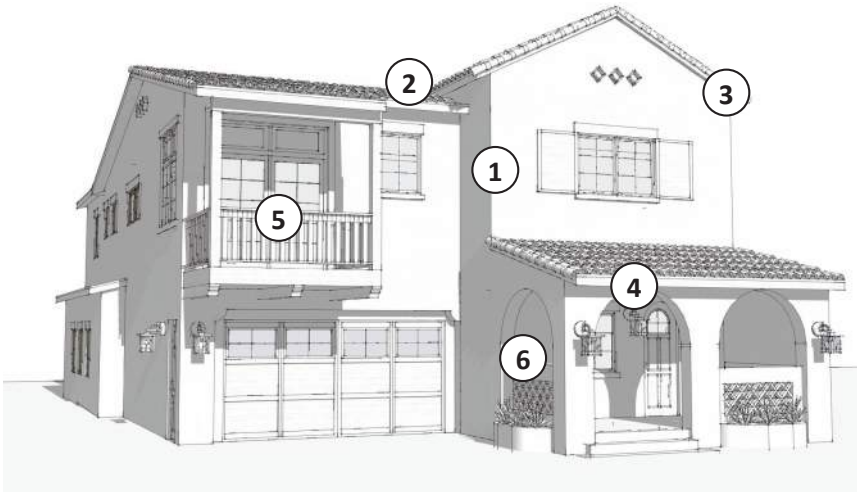


Single-Family (DR-SF1 and DR-SF2)

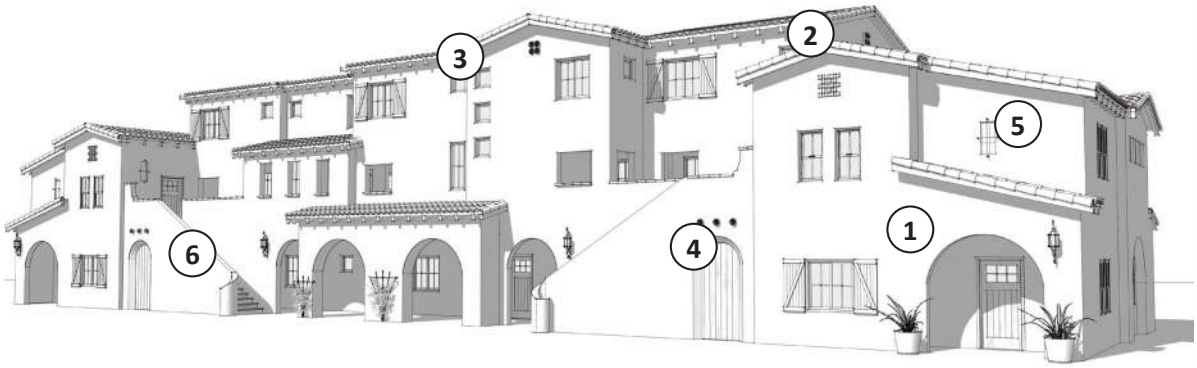
Multi-Family

1. Vertical accent massing at entries
2. Steep pitch gable and shed roofs e.g. 6:12
3. Wood-like surrounds for windows and doors
4. Accentuated lintels and sills
5. Accent features like wood brackets and metal vents and roofs
6. Vertical accent material e.g. board and batten siding

Exhibit 1-2: Spanish Architectural Character



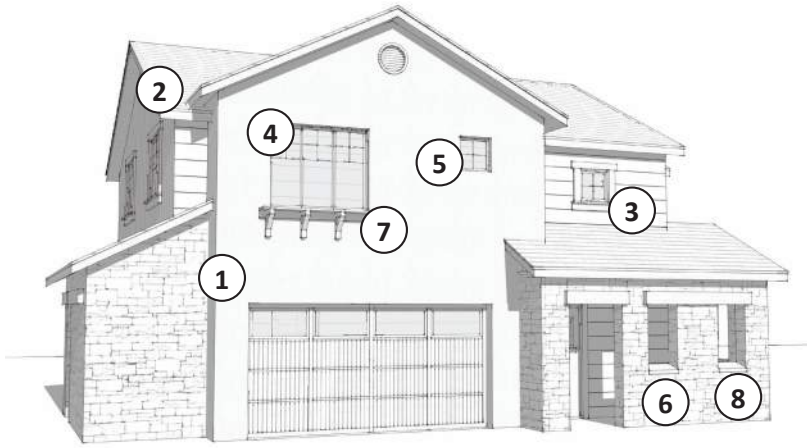
Single-Family (DR-SF1 and DR-SF2)



Multi-Family

1. Simple massing forms
2. Low sloping tile roofs e.g. 4:12 or less
3. Simple detailing at cornice and eaves, although overhangs with exposed rafter tails also typical
4. Arched openings e.g. windows, doors, porches
5. Accent features like wrought iron, decorative tile, and wood shutters
6. Smooth or sand plaster finish

Exhibit 1-3: California Ranch Architectural Character



Single-Family (DR-SF1 and DR-SF2)

Multi-Family

1. Asymmetrical massing with primary fronting gables.
2. Low pitched hipped or gabled roof with wide eaves e.g. 4:12 pitch max and 18" min eaves.
3. Simple wood-like surrounds for windows and doors at lap siding without accentuated lintels and sills.
4. Picture windows at street.
5. Recessed windows and doors at stucco without surrounds.
6. Recessed windows or precast surrounds at stone and brick.
7. Accent features like simple mouldings, shutters, wrought iron, and precast elements
8. Lap siding, and stucco as typical materials. One accent material that is either brick or ashlar stone.

1.1.B Site Design

B.1. Variation in front yard setbacks, lot widths, and height variation should be used where able to create a diversity of architectural character for the single-family neighborhoods.

B.2. The character of multi-family neighborhoods abutting commercial land uses should provide a pedestrian-friendly environment with accessible sidewalks, parkway landscaping, street trees, and limited driveway access points for ease of pedestrian access.

B.3. Project entry features should be provided at neighborhood points of entry and include a combination of accent landscaping, enhanced paving, decorative walls, and/or other attractive elements that reflect the character of the development.

B.4. Pedestrian linkages to adjacent residential, commercial, and recreation and open space land uses should be provided, as identified in Chapter 2, Exhibit 2-2a.

1.1.C Building Form

C.1. Massing design should include variation in the wall plane (projection and recess), variation in wall height, and rooflines at different levels.

C.2. Portions of the upper story above the first story should be stepped back in order to reduce the scale of the façade that faces the street and the rear yards and to break up the overall massing. In-lieu of an upper story setback, desired variation could be achieved with a porch covering a minimum of 30% of the front facade.

C.3. Architectural elements that add visual interest, scale, and character to the neighborhood, such as recessed or projecting balconies, verandas, or porches should face the street and be included within building designs.

C.4. At a minimum, side and rear elevations should include architecturally authentic materials, trim around windows and doors, and appropriate terminations or transitions for material changes at inside corners.

1.1.D Roofs

D.1. A variety of roof planes and pitches, porches, overhangs, and accent details should be incorporated into home designs to increase the visual quality and character of a building, while reducing the bulk and size of the structure.

D.2. Roof penetrations for vents should be consolidated and located on the rear side of roof ridges whenever practical. Vents should be painted to match the roof color.

D.3. Placement of rooftop solar panels should minimize visual impacts to public views by integrating panels on the same plane as the roof slope. Solar panels made to look like tile, shingles, or slates are encouraged.

Building Form, Roofs - Refer to page A-6 for callout text.

1.1.E Windows and Doors

E.1. Windows should be articulated with accent trim, sills, shutters, window flower boxes, awnings, trellises, and/or other elements authentic to the architectural style of the building.

E.2. Windows, doors, and garage doors should incorporate architectural detailing that is consistent with the overall architectural style of the building.

E.3. Windows should incorporate proportions and divided lites appropriate to the architectural style.

E.4. Garages should be a secondary element on the home's main façade to minimize the visual impact of the garage door and parking apron from the street. Side loaded or hollywood style garages are also encourage to provide variety along street frontages.

E.5. Garages for single-family homes should provide storage for trash/recycling/green waste receptacles either inside the garage or screened from view along a side yard.

E.6. Mirrored glass and/or reflective coating on doors and window glass is prohibited.

1.1.F Entries and Porches

F.1. Primary residential entries should be enhanced to reflect the architectural style and details of the home.

F.2. Homes located on corner lots should have terraces, patios, and/or porches that wraparound and address both the primary and secondary building frontages. Corner lots should locate the driveway along the side frontage.

F.3. Multi-family buildings shall have covered porches, entries, or walkways that front onto the street, pocket park, or open space.

F.4. Porches shall be a primary element on the main facade have a minimum depth of six (6) feet (i.e. porch posts or columns may protrude into the minimum six (6) feet of depth).

1.1.G Colors and Materials

G.1. Materials and colors should be used in an authentic manner, reinforcing the chosen architectural style.

G.2. A variety of roof materials and color palettes consistent with the architectural style of the homes should be incorporated to enhance the character of the community.

Windows and Doors, Entries and Porches, Colors and Materials - Refer to page A-8 for callout text.

1.1.H Residential Fencing

H.1. Front yard fencing type should be wood, composite wood-textured, open style metal, stucco wall, stone and/or a combination of these listed materials and be consistent with the architectural style of the home.

H.2. Where a side or rear yard is abutting a residential land use, closed wood fencing and/or similar composite wood-textured material shall be used. Refer to Exhibit 1-4.

H.3. Where a side or rear yard is abutting, pocket park, or open space use, wood fencing and/or similar composite wood-textured material should be used to 4-feet in height with an additional 2-feet comprised on top of a minimum 50% open rail permeable fencing. Refer to Exhibit 1-6.

H.4. Rear yard fencing of abutting residential neighborhoods, such as Neighborhood 4 and 5, shall maintain consistency in fencing type and material.

H.5. Rear yard fencing adjacent to or across from Recreation or Open Space land uses should utilize either an open style metal fence type or wood fencing and/or similar composite wood-textured material should be used to 4-feet in height with an additional 2-feet comprised on top of a minimum 50% open rail permeable fencing. Fencing selection shall be consistent across an individual neighborhood. Refer to Residential Single Family Fencing Exhibit.

H.6. If fencing required at multi-family land uses (Neighborhoods 1, 2, and 10), it should be located at required setbacks and be open style metal style. Refer to Exhibit 1-5.

H.7. Finished side of fencing should face street side yards, open spaces, or other public spaces.

H.8. Use of chain link, razor/barbed wire, non-matte finish vinyl fencing, and temporary fencing, except for construction related temporary fencing, are prohibited.

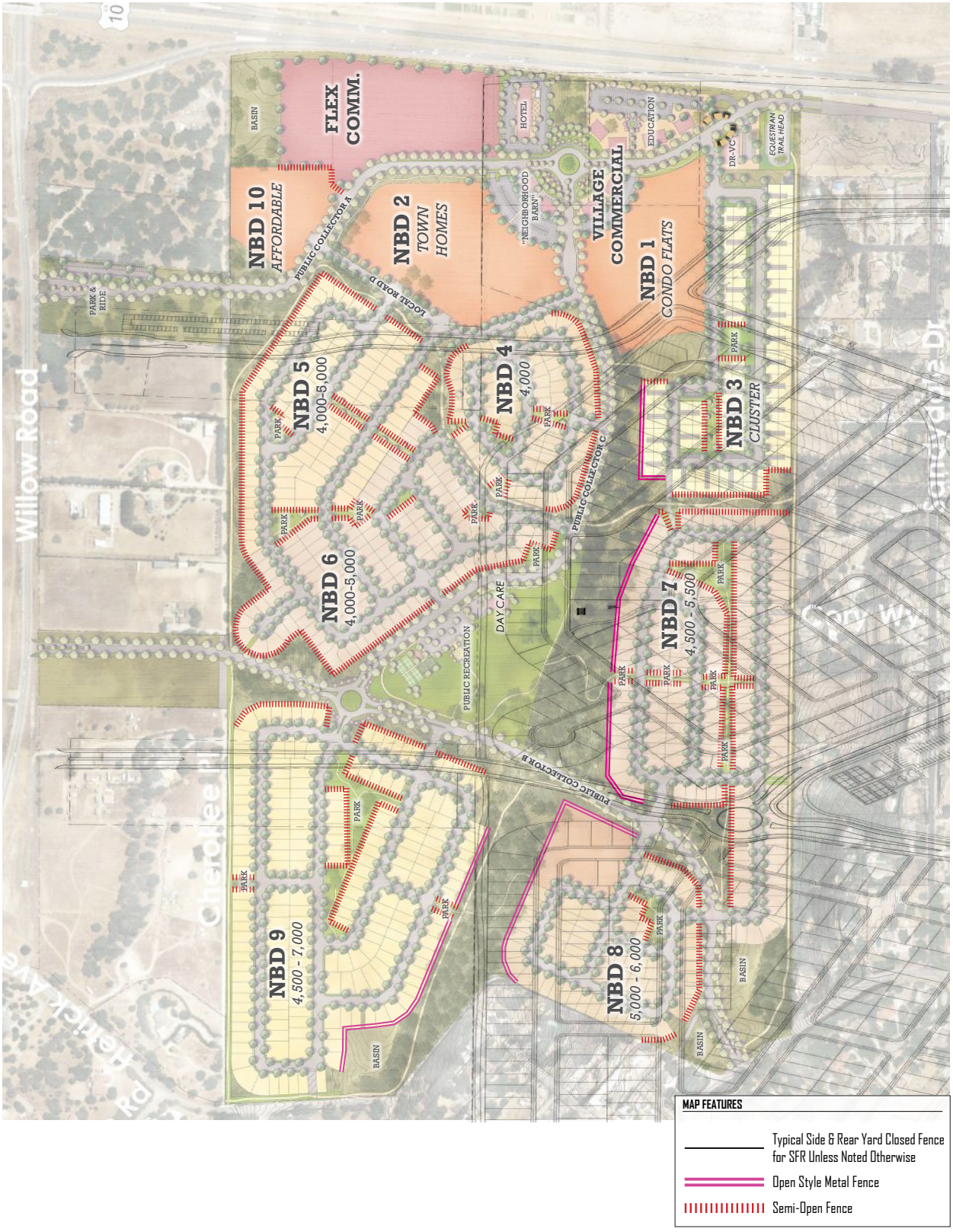
Fencing Concepts

Exhibit 1-4: Closed Wood Fence Example

Exhibit 1-5: Open Style Metal Fence Example

Exhibit 1-6: Semi-Open Wood Fence Example

Residential Single-Family Fencing



1.1.I Yard Areas

I.1. All single-family units should have at least one usable private yard area in accordance with the design standards in Chapter 2 of the DRSP. Multiple usable outdoor areas (i.e. front, side, and/or rear) are preferable and encouraged where practical.

I.2. Private Yard Areas may include balconies, terraces, patios, roof decks, and/ or side and rear yards.

I.3. Functional and usable outdoor porches, patios, courtyards, roof decks, and/or other areas for the use of all building residents are encouraged for multi-family buildings.

1.1.J Landscape

J.1. Native trees, plants, and other low water using plant varieties are encouraged within the DRSP and should be integrated into the residential neighborhoods and individual residences to the greatest extent practical.

J.2. Native coast live oak trees shall be used in neighborhood parkways.

J.3. If turf is utilized as part of landscape design, it should not exceed 1,000 square feet in size.

J.4. Front yard landscaping shall be installed by the developer prior to occupancy by a resident.

J.5. Landscape design shall be consistent with applicable MWELO requirements for water efficiency.

J.6. All landscape plans shall be prepared by a licensed landscape architect.

1.1.K Lighting

K.1. Type and design of site and building lighting fixtures shall be “dark-sky” compliant, consistent with the International Dark-Sky Association or County of San Luis Obispo requirements.

K.2. Building lighting shall complement the architectural style of the building it serves.

K.3. Any lighting utilized as part of a residential neighborhood signs shall be complementary to the individual design aesthetic of the surrounding neighborhood.

K.4. Security lighting shall be subject to approval by the HOA. Lighting must be activated by motion sensors and shall be on no longer than 5 minutes with automatic shut off, the type which shall be selected and located so that it does not activate frequently due to regular outdoor traffic or activity, including minor movements typically produced by animals or leaf litter.

K.5. Special care shall be taken to control glare and direct visibility of security lighting illumination sources, and to confine illumination to the property on which the fixtures are located.

K.6. Lighting fixtures shall be energy efficient in accordance with the latest version of the California Energy Standards (Title 24).

1.1.L Utilitarian

L.1. Rain gutters, downspouts, vents, and other roof protrusions should complement the adjacent materials and/or colors.

L.2. Any outdoor mechanical or utility equipment/meters, antennae, "dish type receivers", etc, whether on a roof, side of a structure, or ground mounted should be appropriately screened from view. Method of screening should be architecturally integrated with the adjacent structure in terms of materials, color, shape, and size.

L.3. Trash and recycling bins for single-family dwellings shall be screened from view from the street.

L.4. Utility service areas for multi-family buildings should be placed within enclosures that are architecturally integrated into the building design.

1.1.M Accessory Structures

M.1. Accessory structures, including detached garages and carports, accessory dwelling units, grouped mailboxes, storage and maintenance facilities, recreational facilities, picnic shelters, and outdoor shade structures, should incorporate compatible materials, scale, colors, architectural details, and roof slopes as the primary residential buildings they serve.

M.2. For multi-family projects, trash enclosure and recycling storage areas should be located in convenient areas with reduced visual prominence, such as inside parking courts or at the end of parking bays.

1.1.N Signage

Signage for the individual neighborhoods within the DRSP shall be subject to the guidelines outlined below, including those for neighborhood, wayfinding and directional, and street signage. Where the DRSP is silent, the County of San Luis Obispo Sign Ordinance will apply. In instances where there may be inconsistencies between the DRSP and the County of San Luis Obispo Sign Ordinance, the DRSP shall prevail.

N.1. Individual residential neighborhood logos, branding, and signage should be integrated through an established logo and sign program in order to create an identity for each residential neighborhood and should be secondary to the overall DRSP logo and branding.

N.2. Where a residential neighborhood includes multiple entry monuments or signage, the overall look and aesthetic should be consistent throughout.

N.3. Street signs shall be as specified by the Manual on Uniform Traffic Control Devices (MUTCD) or by special request, subject to the review and approval of the County. Any unique sign color shall be utilized consistently within the overall neighborhood's framework.

N.4. Street identification signs and traffic control signs shall be mounted on light poles to organize these signs in a manner that minimizes the number of poles required.

N.5. Prohibited signage in residential land uses include pole, rotating, neon, or flashing signs.

N.6. Address numbers shall be clearly identifiable from the street.

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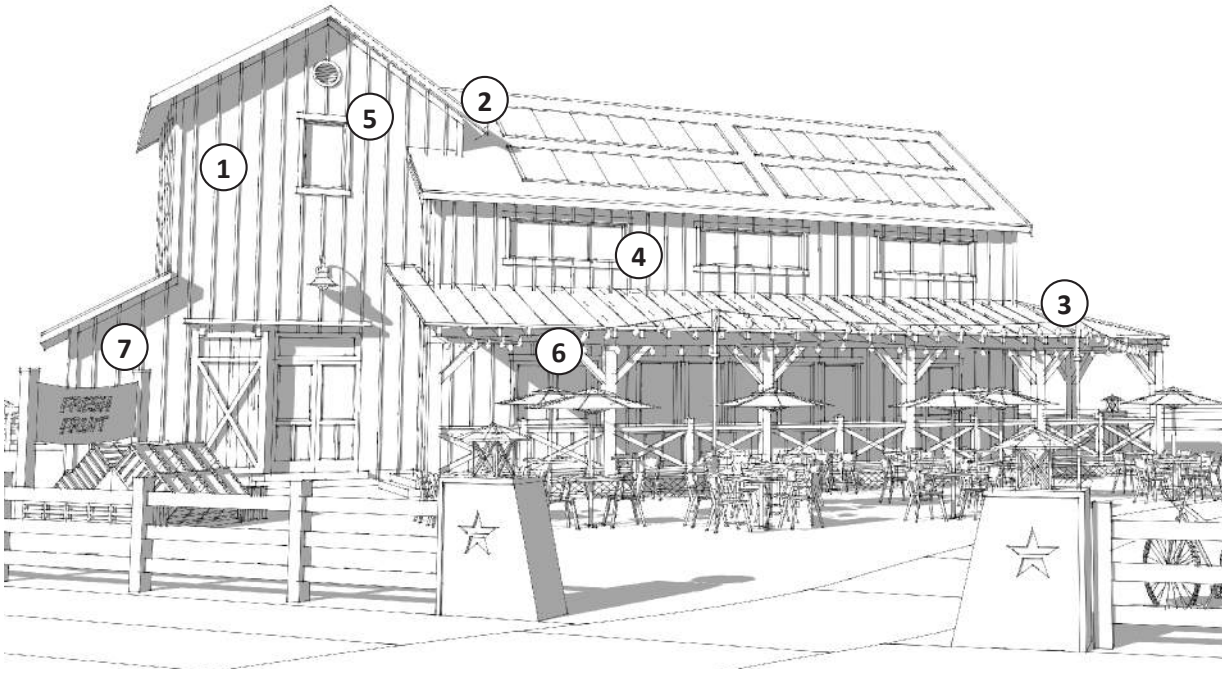
2.1 COMMERCIAL DESIGN GUIDELINES

The following design guidelines apply to commercial, office, hotel, and educational development within the DRSP. They are general in nature, however a number are land use specific and are noted as such herein.

2.1.A Architectural Styles

A.1. All buildings shall be designed with an Agrarian style of architecture. However, building(s) within the Flex Commercial land use areas may use contemporary interpretations of Agrarian style to accommodate the equipment and functional requirements associated with larger structures. Refer to Exhibit 2-1.

Exhibit 2-1: Commercial Architectural Character (Village Commercial shown)



1. Vertical accent massing at entries
2. Long, horizontal shed and gable roofs steep in pitch e.g. 6:12
3. Hipped roofs at attached or accent elements
4. Wood-like surrounds for windows and doors
5. Accentuated lintels and sills
6. Accent features like wood brackets and metal vents and roofs
7. Vertical accent material e.g. board and batten siding

2.1.B Site Design

B.1. Buildings should be sited close to and oriented toward external and interior streets. Building design should incorporate pedestrian walkways, outdoor seating, and landscape areas where practical.

B.2. Parking in Village Commercial areas should be internalized behind building groups or oriented away from street frontages to minimize visual impact on the street where practical. In Flex Commercial areas, landscaping, low walls, berms, and/or other means to minimize views of parking areas while maintaining views of buildings necessary for their success on site should be pursued.

B.3. Plazas, courtyards, pocket parks, and outdoor cafes should be designed in an inviting manner that encourages pedestrian use through the incorporation of trellises, pergolas, art, seating, and shade trees.

B.4. Site amenities, including benches, drinking fountains, provisions for bicyclists, and public art, should be utilized and should complement the project's architectural character.

B.5. Streetscape at the roundabout should utilize special features such as unique street furniture, street lights, increased and planting intensity, unique signage and other special details and enhancements to assure the Village Center is a focal point of the project.

Site Design Concept

2.1.C Building Form

C.1. The appearance of several smaller buildings, rather than one large building, should be pursued to foster an intimate, pedestrian-friendly scale.

C.2. Vertical elements such as towers should be used to accent horizontal massing and provide visual interest, especially on corner buildings.

C.3. For the Village Commercial land use, buildings shall be designed in a manner such that all sides of the building have been detailed to complement the primary street elevation in architecture, details, and materials. Buildings should be aesthetically pleasing from all angles, especially for buildings that have high visibility. Particularly in the Flex Commercial land use, buildings that require significant utility and service areas shall incorporate screening into the design of the building, site planning, and landscape design.

C.4. For the Flex Commercial land use, architectural emphasis should be placed at the primary street elevations, allowing for necessary "back of house" operations at rear.

C.5. Pedestrian scale should be created through the use of awnings, arches, walls, trellises, arbors, pergolas, and/or other architectural elements. These elements should be integrated into the building design to avoid the look of "tacked on" architectural features.

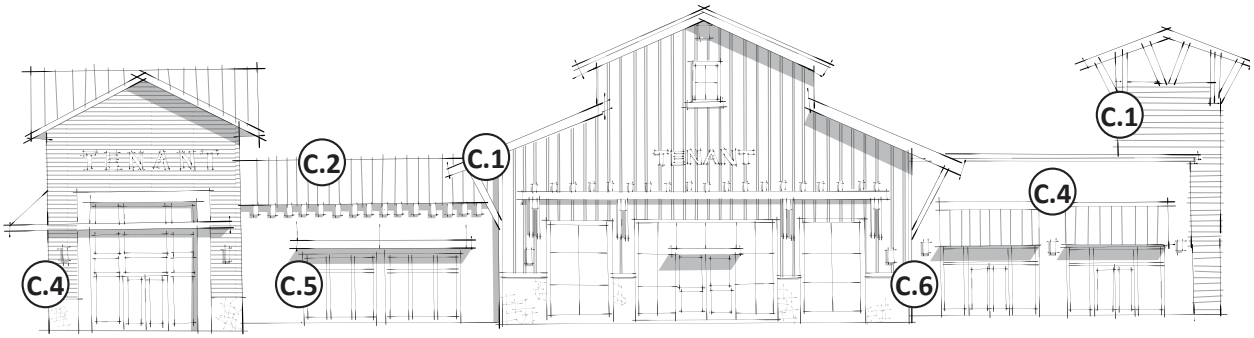
C.6. Storefront windows, display cases, and other elements that provide visual interest to facades should be provided. Mirrored glass or reflective coatings are prohibited.

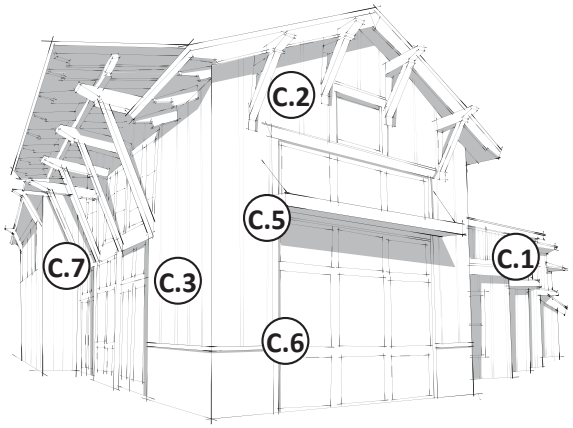
C.7. Details such as wall surfaces constructed with patterns, changes in materials, building pop-outs, columns, and recessed areas should be used to create shadow patterns and depth on the wall surfaces.

C.8. Building facades facing paseos or plazas should be articulated with detail and display windows.

C.9. Murals, trellises, or vines should be placed on large expanses of walls at the rear or sides of buildings to soften the appearance and create visual interest.

Building Form (Flex Commercial shown) - Refer to page A-17 for callout text.





Building Form (Village Commercial shown) - Refer to page A-17 for callout text.

2.1.D Roofs

D.1. A variety of roof planes and pitches, porches, overhangs, and accent details should be incorporated into the commercial designs to increase the visual quality and character of a building, while reducing the bulk and size of the structure.

D.2. Roofs covering the entire building, including hips and gables, are preferred in the Village Commercial land use.

D.3. Buildings in the Flex Commercial land use are allowed to have flat or low pitched roofs but should incorporate parapets or other architectural elements to break up long horizontal rooflines. Accent mansard roofs consistent with the Agrarian style are allowed, except at building corner locations.

2.1.E Windows and Doors

E.1. Windows, doors, and service doors visible from the street should incorporate architectural detailing and color that is consistent with the overall architectural style of the building.

E.2. Windows should be articulated with accent trim, sills, shutters, window flower boxes, awnings, trellises, and/or other elements authentic to the architectural style of the building.

2.1.F Primary Entries

F.1. Primary entries for commercial uses should be emphasized through the use of building form, architectural detailing, lighting, landscaping, and/or unique paving, among other elements.

2.1.G Colors and Materials

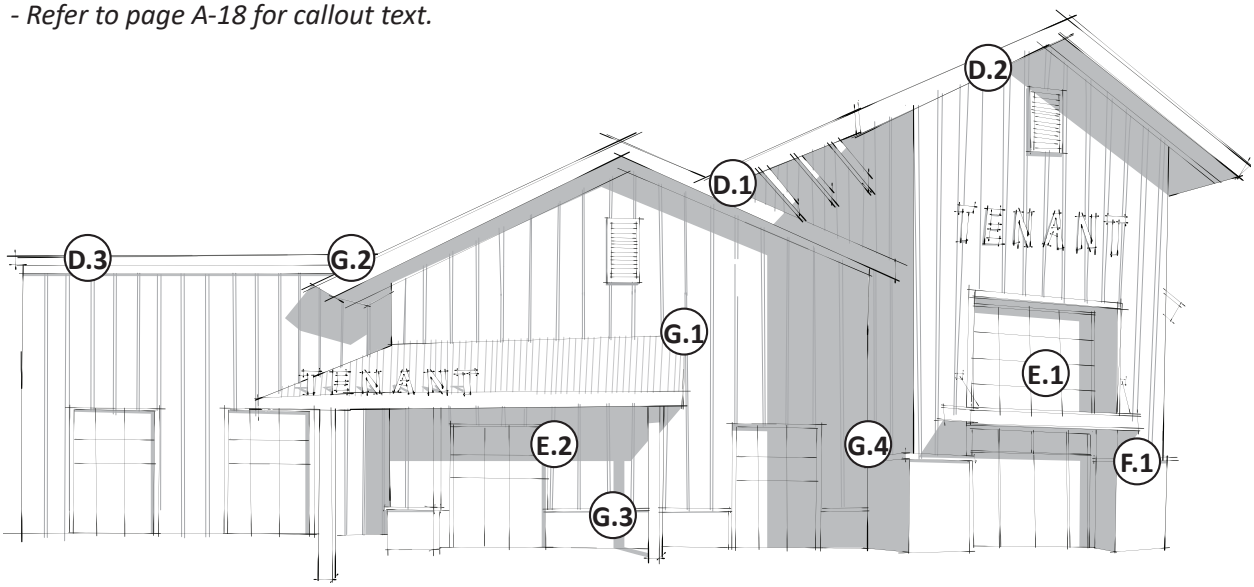
G.1. Materials and colors should be used in an authentic manner, reinforcing the chosen architectural style.

G.2. Roof materials and colors consistent with the architectural style of the commercial use should be incorporated to enhance the character of the community.

G.3. Where appropriate to the architectural style, consider varying materials and textures between the base and body of a building to break up large wall planes and add a visual base to the building.

G.4. Material changes should occur at intersecting planes to appear substantial and integral to the facade. Material or color changes at the outside corners of structures should be avoided.

Roofs, Windows and Doors, Primary Entries, Colors and Materials
- Refer to page A-18 for callout text.



2.1.H Commercial Fencing

H.1. Where a commercial land use is abutting residential, open space, or recreation land uses, no side, street side, or rear yard fencing is required. Parallel walls between residential and commercial land uses are discouraged. Refer to Chapter 2 of the DRSP for relevant commercial fencing development standards.

H.2. Use of chain link, razor/barbed wire, non-matte finish vinyl fencing, and temporary fencing, except for construction related temporary fencing, are prohibited. Chain link or barbed wire fence may be utilized along the Highway 101 frontage, consistent with Caltrans requirements.

2.1.I Landscape

I.1. Native trees, plants, and other low water using plant varieties are encouraged within the DRSP and should be integrated into the project to the extent practical.

I.2. Native coast live oak trees shall be used within the design of commercial land uses areas, such as for street trees, parkways, and plazas. No coast live oak trees shall be used within parking areas.

I.3. Landscape design shall be consistent with applicable MWELO requirements for water efficiency.

I.4. All landscape plans should be reviewed by a licensed landscape architect.

2.1.J Highway 101 Landscape Buffer

In order to sensitively address the DRSP adjacency to U.S. Highway 101, the following screening standards apply to commercial land uses located adjacent to U.S. Highway 101.

J.1. A minimum 10-foot landscape buffer shall be provided along U.S. Highway 101 where commercial land use “back of house” areas are located directly adjacent to U.S. Highway 101. Landscape buffer plantings utilized shall be selected to be compatible with the overall character and aesthetic of the DRSP, such as oak trees and/or other native plantings.

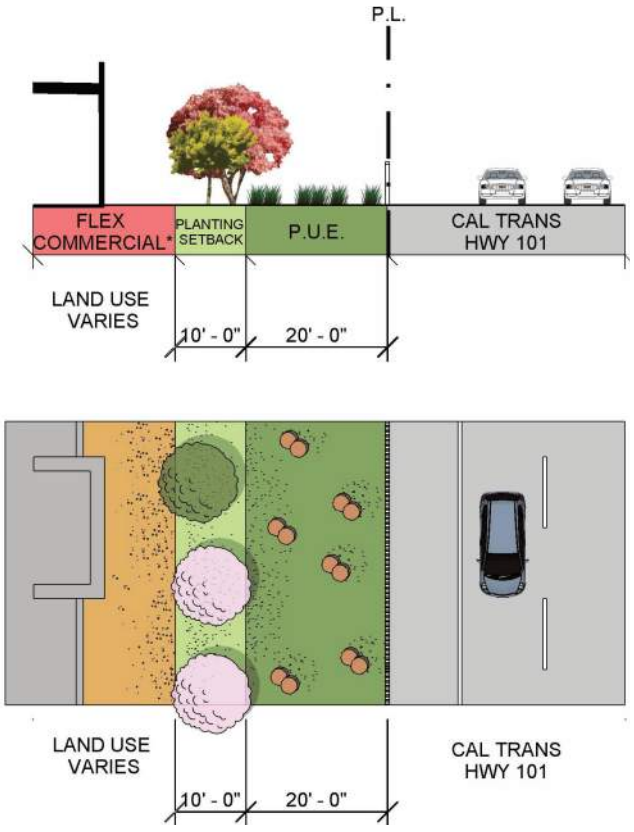
J.2. To the extent permissible and practical, the existing 20-foot PUE adjacent to U.S. Highway 101 shall be landscaped.

J.3. Where parking is to be located directly adjacent to U.S. Highway 101, a berm, headlight hedge, and/or masonry wall no higher than 48-inches shall be provided to minimize cross highway lighting. Where masonry walls are to be used, walls shall be of a consistent design and character along the entire U.S. Highway 101 property line.

J.4. Trash and recycling enclosures and loading areas should be located to minimize views from U.S. Highway 101 and screened through use of vertical growing landscaping or walls.

J.5. Any mechanical or other outdoor equipment, whether on a roof or side of a structure visible from U.S. Highway 101, should be appropriately screened from view. The method of screening should be architecturally compatible with the adjacent structure in terms of materials, colors, shape, and size and be used in combination of vertically growing landscaping, where practical.

Highway 101 Landscape Buffer



2.1.K Lighting

K.1. Type and design of street light fixtures shall be chosen from those available from Pacific Gas and Electric (PG&E).

K.2. Pedestrian lighting shall incorporate a cohesive design that is consistent with the vision and character of the DRSP.

K.3. Fixtures for pedestrian lighting shall be made of durable and high-quality materials for maximum resistance to vandalism and tampering.

K.4. Pedestrian lighting shall be utilized in paseos, plazas, parking lots, and other public areas, except for open space land uses , to delineate pedestrian spaces and pathways.

K.5. Parking lot light pole bases shall incorporate a cohesive design for consistency throughout the DRSP where required.

K.6. Type and design of architectural and landscape light fixtures shall be “dark-sky” compliant.

K.7. Architectural and landscape lighting shall complement the architectural style of the building it serves.

K.8. Architectural and landscape up-lighting, if proposed, shall only be used to highlight special features or elements.

K.9. Ambient lighting with exposed bulbs, such as string lights, may be allowed to accent outdoor dining and seating areas, plazas, patios, and event spaces.

K.10. Security lighting activated by motion sensors shall be on no longer than 5 minutes with automatic shut off, the type which shall be selected and located so that it does not activate frequently due to regular outdoor traffic or activity, including minor movements typically produced by animals or leaf litter.

K.11. Special care shall be taken to control glare and direct visibility of security lighting illumination sources, and to confine illumination to the property on which the fixtures are located.

K.12. Lighting fixtures shall be energy efficient in accordance with the latest version of the California Energy Standards (Title 24).

2.1.L Utilitarian

L.1. Rain gutters, downspouts, vents, and other roof protrusions should complement the adjacent materials and/or colors.

L.2. Any outdoor mechanical equipment, whether on a roof, side of a structure, or ground mounted should be appropriately screened from view. Method of screening should be architecturally integrated with the adjacent structure in terms of materials, color, shape, and size.

L.3. Utility service areas for commercial land uses should be placed within enclosures that are architecturally integrated into the building design.

L.4. Loading and “back of house” areas should be located to the rear of a site and be adequately screened from view. Walls may be used up to six (6) to eight (8) feet in height to allow for screening and noise buffering.

L.5. Trash enclosure and recycling storage areas should be located in convenient areas with reduced visual prominence.

2.1.M Signage

M.1. Signage for the individual commercial land uses shall be consistent with the County of San Luis Obispo Sign Ordinance.

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3.1 Recreation and Open Space

The following design guidelines apply to recreation development and open space areas within the DRSP. They are general in nature, however a number are land use specific and are noted as such herein.

3.1.A Public Neighborhood Park

A.1. The Public Neighborhood Park should be designed to provide neighborhood recreation needs including a mix of passive and active areas. This could include playground or play features, pickleball court(s), open turf area, among other potential passive and active features.

A.2. Public Neighborhood Park features may include bicycle racks, drinking fountains, entry signage and landscaping, picnic areas, interpretive signage, parking, restroom facilities, shade canopy, trail connections, trash and recycle bins, and/or wayfinding signage or kiosk, among other potential features.

A.3. Any on-site parking associated with the Public Neighborhood Park shall be located within a parking lot or other parking space configurations on the north side of the park.

A.4. Programming of the Neighborhood Park may include shared facilities or related uses with the proposed privately owned and operated daycare facility.

A.5. Design of the restroom and daycare buildings shall be consistent with an Agrarian architecture theme.

Public Neighborhood Park Concept

3.1.B Pocket Parks

B.1. Pocket Parks shall be provided within each single-family neighborhood and should be designed to provide for passive areas for neighborhood specific recreation needs.

B.2. Pocket Park features may include bicycle racks, children's play area, picnic areas, interpretive signage, natural play areas, neighborhood mailbox facilities, parking areas, trail connections, trash and recycle bins, and/or wayfinding signage or kiosk, among other potential features.

Pocket Park Concept

3.1.C Open Space

C.1. Each neighborhood located directly adjacent to the central oak woodland should provide convenient access via a pedestrian trail. Yards of single-family residential uses abutting open space shall not have gates onto the open space.

3.1.D Equestrian Staging Area

D.1. The equestrian staging area should provide a minimum of eight (8) parking spaces that can accommodate a vehicle with trailer configuration to allow for adequately loading/off-loading and saddling of horses.

D.2. A trailhead should be provided with hitching posts, perimeter fencing, wayfinding signage, and information kiosk.

D.3. Temporary restroom facilities should be located to minimize visibility from the Frontage Road and adjacent neighborhoods. Landscaping, fencing, and/or other design interventions should be used to minimize visibility of these facilities.

Equestrian Staging Area Concept

3.1.E Basins and Low-Impact Development

A number of deep and shallow basins as well as roadside low-impact development areas intended to treat and mitigate runoff are proposed as part of the DRSP. The following provides design direction for deep and shallow basins and roadside low-impact development areas within the DRSP.

E.1. Deep basins shall incorporate 6-foot open style metal fence. Access gates shall be constructed of the same material and include a minimum opening of 14-feet.

E.2. Trees, shrubs, and groundcover used for screening views of the basins shall be native, drought tolerant, and/or low water using. If landscaping is allowed within the deep basin, it shall be able to thrive during seasonal conditions while maintaining access and functionality of the facility.

E.3. Shallow basins shall contain location appropriate landscaping that is able to thrive during seasonal conditions

E.4. Roadside low-impact development areas shall utilize a combination of decorative rock and gravel, location appropriate landscaping, and necessary inlets and/or catch basins.

3.1.F Recreation and Open Space Fencing

F.1. Three-rail, split rail fence of wood or similar composite wood-textured material shall be used at pubic neighborhood parks, pocket parks, and streets, as shown in the Recreation and Open Space Fencing exhibit.

Recreation and Open Space Fencing

F.2. Open style metal fence may be use at Equestrian Staging Area and Daycare and shall be setback ten (10) feet from the property line, as shown on the Recreation and Open Space Fencing Exhibit.

F.3. Use of razor/barbed wire, non-matte vinyl fencing, and temporary fencing, except for construction related temporary fencing, are prohibited. Chain link may be used to provide security for recreation land uses and basins but shall be black vinyl clad, or equivalent, with posts to match.

3.1.G Landscape

G.1. Native trees, plants, and other low water using plant varieties are encouraged within the DRSP and should be integrated to the extent practical.

G.2. Native coast live oak trees shall be used within the design of recreation areas, such as at trails, pocket parks, and public neighborhood park. No coast live oak trees shall be used within parking areas.

G.3. Turf areas within the public neighborhood park and pocket parks shall be limited to those areas intended

G.4. Landscape design shall be consistent with applicable MWELO requirements for water efficiency.

G.5. All landscape plans should be reviewed by a licensed landscape architect.

3.1.H Lighting

H.1. Type and design of street and pedestrian light fixtures shall be “dark-sky” compliant.

H.2. Street and pedestrian lighting shall incorporate a cohesive design that is consistent with the vision and character of the DRSP.

H.3. Fixtures for street and pedestrian lighting shall be made of durable and high-quality materials for maximum resistance to vandalism and tampering.

H.4. Pedestrian lighting shall be utilized in paseos, plazas, parking lots, and other public areas, except for open space land uses, to delineate pedestrian spaces and pathways.

H.5. Attractive parking lot light pole bases shall incorporate a cohesive design for consistency throughout the DRSP where required.

H.6. Architectural and landscape lighting shall complement the architectural style of the building it serves.

H.7. Architectural and landscape up-lighting, if proposed, shall only be used to highlight special features or elements.

H.8. Ambient lighting with exposed bulbs, such as string lights, may be allowed to accent outdoor dining and seating areas, plazas, patios, and event spaces.

H.9. Security lighting activated by motion sensors shall be on no longer than 5 minutes with automatic shut off, the type which shall be selected and located so that it does not activate frequently due to regular outdoor traffic or activity, including minor movements typically produced by animals or leaf litter.

H.10. Special care shall be taken to control glare and direct visibility of illumination sources, and to confine illumination to the property on which the fixtures are located.

H.11. Lighting fixtures shall be energy efficient in accordance with the latest version of the California Energy Standards (Title 24).

3.1.I Utilitarian

I.1. Rain gutters, downspouts, vents, and other roof protrusions should complement the adjacent materials and/or colors.

I.2. Any outdoor mechanical equipment, whether on a roof, side of a structure, or ground mounted should be appropriately screened from view. Method of screening should be architecturally integrated with the adjacent structure in terms of materials, color, shape, and size.

I.3. Utility service areas for buildings within the recreation land use should be placed within enclosures that are architecturally integrated into the building design.

I.4. Trash enclosure and recycling storage areas should be located in convenient areas with reduced visual prominence.

3.1.J Signage

J.1. Pedestrian-oriented projecting, sculptured cantilevered, or individually crafted plaque signs are encouraged within recreation and open space areas, such as at trailheads, public neighborhood parks, pocket parks, and other open space areas.

J.2. Recreation and open space signage within the DRSP shall complement the vision and character outlined for the project in terms of material and color use, placement, and design.

J.3. Directional signs located at or along trails or pathways shall be a maximum size of two (2) square feet in size.

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4.1 Gateways and Wayfinding Signage

Gateway and wayfinding signage are important elements to bring attention to and direct future residents and visitors of the DRSP. The following design guidelines are relevant to the gateway and wayfinding signage for the DRSP.

1. Primary gateway monuments shall be provided at Frontage Road/Willow Road, Collector B/Willow Road, and at the intersection of Frontage Road/1st Intersection. Signage face containing the text portion of the primary gateway monuments will be approximately 12-feet high by 20-feet wide, excluding raised planter area at base of the sign and the vertical support.

2. Secondary gateway monuments shall be provided at Frontage Road/Cherokee Place, Collector B/ Cherokee Place, and Collector B/Pomeroy Road.

3. All gateway monuments shall utilize an agrarian architecture theme that reflects the DRSP character, with similar materials and colors as shown in the concepts below.

4. Gateway monuments shall incorporate a combination of decorative walls, accent landscaping, enhanced paving, accent lighting, and specimen trees - preferably coast live oaks.

5. Secondary gateway shall be subordinate to the primary gateways but will maintain consistency in terms of materials and colors and decorative elements utilized.

6. Wayfinding and directional signage should be located at key locations within the DRSP to provide direction to important services and destinations, such as commercial areas, parks, trailheads, or trail crossings.

7. Design of other wayfinding and directional signage shall be in keeping with the DRSP character and then theming of the gateway signage.

Primary Gateway Concept - Frontage Road at Southeast Entry

Primary Gateway Concept - Frontage Road at Willow Road

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5.1 Park and Ride and Transit Stops

The following design guidelines are applicable to the park and ride facility and transit stops within the DRSP.

1. The park and ride shall contain a minimum of eighty (80) parking spaces.
2. Native trees, plants, and other low water using plant varieties are encouraged within the DRSP and should be integrated to the extent practical.
3. Signage and lighting required for the park and ride facility shall be consistent with County requirements.
4. Any required shelter, signage, or lighting for transit stops within the DRSP shall be subject to the requirements of the San Luis Obispo Regional Transit Authority.

Park and Ride Concept

B. Phasing and Public Improvements Implementation Matrix

The following phasing and public improvements implementation matrix contains detailed descriptions of the anticipated order of buildout of the DRSP and builds upon the information described in Chapter 5: Infrastructure and Phasing. Phases shown address goals to accommodate orderly development and provision of services. They represent a reasonable approach to extending services and infrastructure throughout the DRSP. In some cases, property owners may wish to develop phases concurrently or in a different order than anticipated. This will be permitted provided all public improvements needed to support proposed development are completed, and that circulation is provided for secondary access.

		Neighborhood's / Lots							
	Phase	1	1	1	1	1	1	1	1
	Neighborhood Designations	1 (MF)	2 (MF)	3	5	N/A	10	Flex Comm	Village Comm
	Lot Numbers (see Master Vesting Tentative Tract No. 3159)	Lot 1	Lot 2	Lot 3	Lot 5	Lot 11	Lot 12	Lot 14 & 15	Lot 13 & 16-19
Circulation	North Frontage Road Improvements to project boundary	X	X	X	X	X	X	X	X
	Collector A to Willow	X	X	X	X	X	X	X	X
	Park and Ride along Collector A (near Willow)	X	X	X	X	X	X	X	X
	Willow and Collector A intersection	X	X	X	X	X	X	X	X
	Portion of Collector C (Eastern 600' +/-)	X	X	X	X	X	X	X	X
	Portion of Local Street (North Eastern 675' +/-)	X	X	X	X	X	X	X	X
	Collector B (Pomerory to Willow)								
	Pomerory and Collector B intersection								
	Collector B and Willow intersection								
	Hetrick Avenue & Pomerory Intersection								
	Conversion of a segment of Hetrick to Emergency Access only								
	Collector C (between Collector A and B) & County Park								
	Local Street (between NBD 2 and 4)								
	Closure of Hetrick Avenue and Pomeroy Road								
Sewer	Extention of Sewer in North Frontage Road and Collector A + Lift Station for DR flows	X	X	X	X	X	X	X	X
	Sewer in Collector C (Eastern 600' +/-)								
	Sewer in Local Street (North Eastern 675' +/-)	X	X	X	X	X	X	X	X
	Sewer from Collector A to Collector B - Provide stub for Phase 3								
	Sewer Main in Collector B								
	Lift Station to Serve Neighborhood 9								
	Lift Station to Serve Neighborhood 8								

		Neighborhood's / Lots							
	Phase	1	1	1	1	1	1	1	1
	Neighborhood Designations	1 (MF)	2 (MF)	3	5	N/A	10	Flex Comm	Village Comm
	Lot Numbers (see Master Vesting Tentative Tract No. 3159)	Lot 1	Lot 2	Lot 3	Lot 5	Lot 11	Lot 12	Lot 14 & 15	Lot 13 & 16-19
Water	Extent Water Infrasturcture in North Frontage Road / Collector A to Willow	X	X	X	X	X	X	X	X
	Water in Collector C (Eastern 600' +/-)	X	X	X	X	X	X	X	X
	Water in Local Street (North Eastern 675' +/-)	X	X	X	X	X	X	X	X
	Water in Collector B (connecting Pomeroy and Willow)								
	Water in Collector C (between Collector A and B)								
	Water in Local Street (between NBD 2 and 4)								
Storm Drain	Storm Drain Infrastructure in Collector A (including basins)	X	X	X	X	X	X	X	X
	Storm Drain in Collector C (600' +/-)								
	Storm Drain Infrastructure in Collector B (including basins near Pomeroy and on the west side of the Park)								
	Large Basin NBD 9 Include the infrastructure								
	Storm Drain Infrastructure in Collector C (including basins near Neighborhod 6								

		Neighborhood's / Lots					
	Phase	2	2	2	2	3	3
	Neighborhood Designations	7	8	9	AFFORDABLE	4	6
	Lot Numbers (see Master Vesting Tentative Tract No. 3159)	Lot 7	Lot 8	Lot 9	Lot 10	Lot 4	Lot 6
Circulation	North Frontage Road Improvements to project boundary						
	Collector A to Willow						
	Park and Ride along Collector A (near Willow)						
	Willow and Collector A intersection						
	Portion of Collector C (Eastern 600' +/-)						
	Portion of Local Street (North Eastern 675' +/-)						
	Collector B (Pomerory to Willow)	X	X	X	X		
	Pomerory and Collector B intersection	X	X	X	X		
	Collector B and Willow intersection	X	X	X	X		
	Hetrick Avenue & Pomerory Intersection	X	X	X	X		
	Conversion of a segment of Hetrick to Emergency Access only	X	X	X	X		
	Collector C (between Collector A and B) & County Park					X	X
	Local Street (between NBD 2 and 4)					X	X
	Closure of Hetrick Avenue and Pmeroy Road	X	X	X	X		
Sewer	Extention of Sewer in North Frontage Road and Collector A + Lift Station for DR flows						
	Sewer in Collector C (Eastern 600' +/-)					X	X
	Sewer in Local Street (North Eastern 675' +/-)						
	Sewer from Collector A to Collector B - Provide stub for Phase 3	X	X	X	X		
	Sewer Main in Collector B	X	X	X	X		
	Lift Station to Serve Neighborhood 9			X			
	Lift Station to Serve Neighborhood 8	X	X				

		Neighborhood's / Lots					
	Phase	2	2	2	2	3	3
	Neighborhood Designations	7	8	9	AFFORDABLE	4	6
	Lot Numbers (see Master Vesting Tentative Tract No. 3159)	Lot 7	Lot 8	Lot 9	Lot 10	Lot 4	Lot 6
Water	Extent Water Infrasturcture in North Frontage Road / Collector A to Willow						
	Water in Collector C (Eastern 600' +/-)						
	Water in Local Street (North Eastern 675' +/-)						
	Water in Collector B (connecting Pomeroy and Willow)	X	X	X	X		
	Water in Collector C (between Collector A and B)					X	X
	Water in Local Street (between NBD 2 and 4)					X	X
Storm Drain	Storm Drain Infrastructure in Collector A (including basins)						
	Storm Drain in Collector C (600' +/-)					X	X
	Storm Drain Infrastructure in Collector B (including basins near Pomeroy and on the west side of the Park)	X	X	X	X		
	Large Basin NBD 9 Include the infrastructure	X	X	X	X		
	Storm Drain Infrastructure in Collector C (including basins near Neighborhod 6					X	X

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C. Relevant General Plan Text

The following are excerpts of the County General Plan text, specifically the South County Area Plan (SCAP) and the Land Use Ordinance (LUO), and the Nipomo Community Plan as it relates to the DRSP (formerly known as Cañada Ranch*)*.

As mentioned in Chapter 1 of the DRSP, the SCAP description and policies applicable to the Cañada Ranch were adopted in 1994. At the time, the objectives of the SCAP were aimed at job creation opportunities as well as addressing the jobs housing balance in Nipomo. Although the SCAP described the objective for job creation, it did not identify specific requirements for the type, size, or scale of these expected uses. The SCAP also indicates that housing should be provided on the Cañada Ranch site, but does not provide guidance on the type, size, or scale of the residential development.

Since the adoption of the SCAP, much has changed in the State and in the County. A period of significant economic expansion (housing bubble) and the "great recession" (the housing crash) occurred. Currently and into the foreseeable future, California faces significant challenges in providing housing for the States' growing population. Prices and rents for existing housing have increased dramatically and are continuing to increase. For the first time in many years, the State has begun to intervene in local housing policies. During 2018-2020, over 15 housing bills were passed by the State that set standards, incentives, and enforceable requirements for local agencies to meet their housing goals. More recently, at the time of preparation and review of the DRSP, California, the nation, and the world experienced a pandemic caused by the COVID-19 virus that has further exacerbated housing challenges.

<u>Section 4.5 of the South County Area Plan</u>

"Cañada Ranch Specific Plan Area. An expansion of the urban reserve line north of Nipomo and west of Highway 101 should be evaluated to provide additional employment and associated residential development that will improve the jobs/housing balance within Nipomo. A specific plan should be prepared showing commercial retail, service commercial, and light industrial uses on the large Cañada Ranch property northwest of Sandy Dale Drive and west of Highway 101, shown in Figure 4-4.

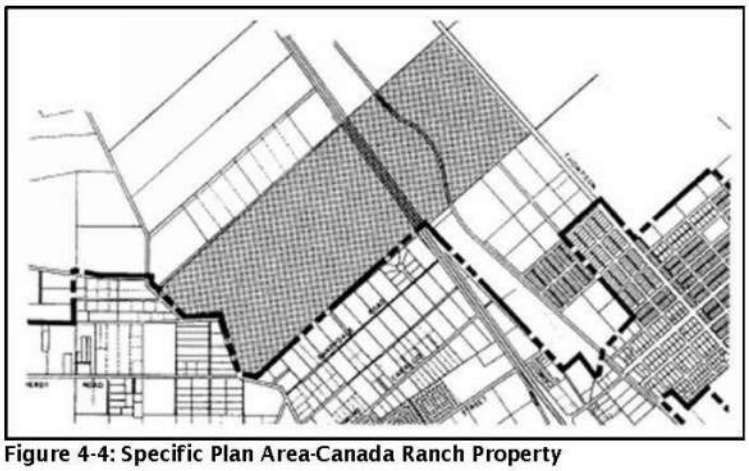

Figure 4-4: Specific Plan Area-Canada Ranch Property

The specific plan should determine the feasible extent of the job-generating uses as a first priority. Residential uses should be considered only in support of employment development. The property has a large oak woodland that should be evaluated for preservation as a long-term habitat. Due to its size, the site is also a potential location for a high school if feasible. A specific plan should be accompanied by market feasibility and fiscal impact studies and an environmental impact report to determine the logical extent and location of development.

Cañada Ranch Objectives.

1. *[Provide] service commercial and light industrial uses designed as business or office parks that have integrated site planning, architecture, and landscaping;*
2. *[Provide] commercial retail uses to serve travelers at an interchange of along Highway 101 and an extension of Willow Road, if the location is determined to occur on this property, as a gateway to the community and employees and users of the area;*
3. *Residential uses that are affordable to employees of the area, to be developed concurrently or in later phases upon the success of the non-residential uses.*

Standards in Article 9 of the Land Use Ordinance require the preparation of specific plans, which have state-mandated content requirements, to identify the optimum types and intensity of these uses in association with residential areas on and off-site. Primary concerns for traffic impacts and transportation alternatives are reflected within the standards. The environmental impacts of the proposed specific plans will be evaluated during their preparation.

Prior to the adoption of any specific plans, any development of these larger holdings, such as the Cañada Ranch property, may cluster the allowed density into smaller parcels to create neighborhoods within larger common open space areas. Suburban scale clustered developments can maintain a rural character by fitting each project into the landscape and minimizing its visibility from public collector and arterial roads and highways."

<u>Section 4.8 of the South County Area Plan</u>

"10. Specific Plan Areas, South County (South). The County should work with property owners to schedule the preparation of specific plans for four areas to increase the amount of employment areas adjacent to or near Nipomo:

a. *Cañada Ranch for industrial, commercial service, commercial retail, and incidental residential uses;*

The specific plans should identify the appropriate scale and intensity of these general uses in more detail, consistent with topics required by Government Code Sections 65450 through 65457 as well as economic issues concerning the most suitable uses."

<u>Section 4.4 of the Nipomo Community Plan</u>

"The conceptual plan for Nipomo that is illustrated in Figure 4-1 shows the concept of neighborhoods adjacent to an expanded central business district. This plan will encourage more convenient distances between residential living and shopping and working, with the intent of reducing the need to commute by automobile. The concept will also help obtain fixed-route

transit service as development continues. Service commercial and industrial areas are located close to residential areas, relying on setbacks, landscape buffering and site design in planned projects to achieve compatibility."

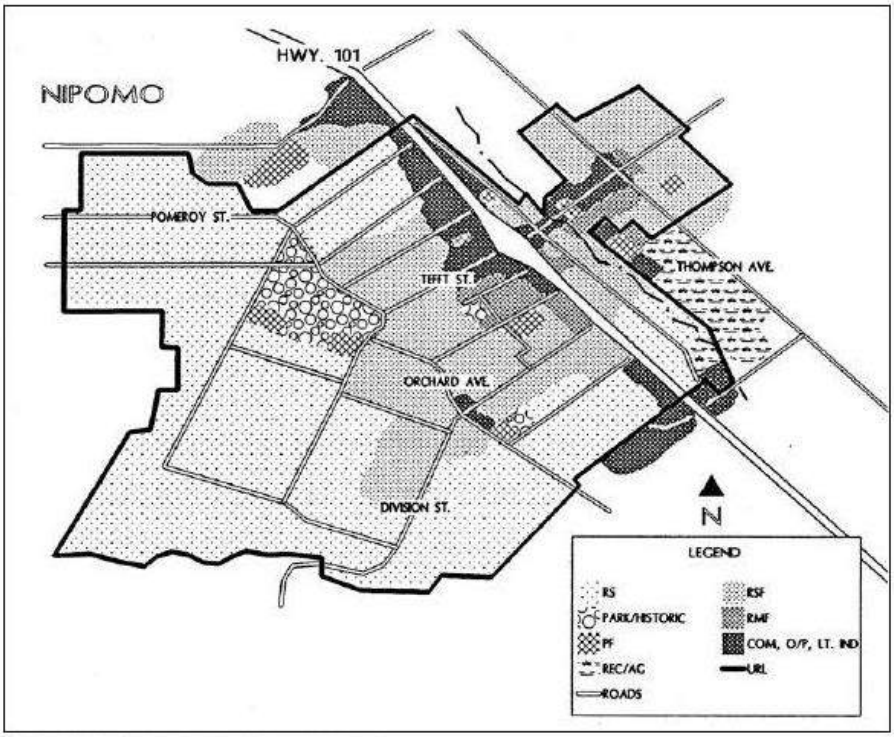

Figure 4-1: Conceptual Plan for Nipomo

Section 22.98.072.H of the Land Use Ordinance

"8. Cañada Ranch property – Specific Plan requirement. A specific plan shall be prepared for the Cañada Ranch property shown in Figure 98-40 under the guidance of the County upon the application and funding by the property owner(s) prior to the approval of land division applications, although a clustered land division proposed in compliance with the Residential Rural category, Section 22.22.140, and other applicable provisions of this Title, may be approved without Specific Plan preparation. The Specific Plan shall be prepared in compliance with Government Code Section 65450 to plan for the following:

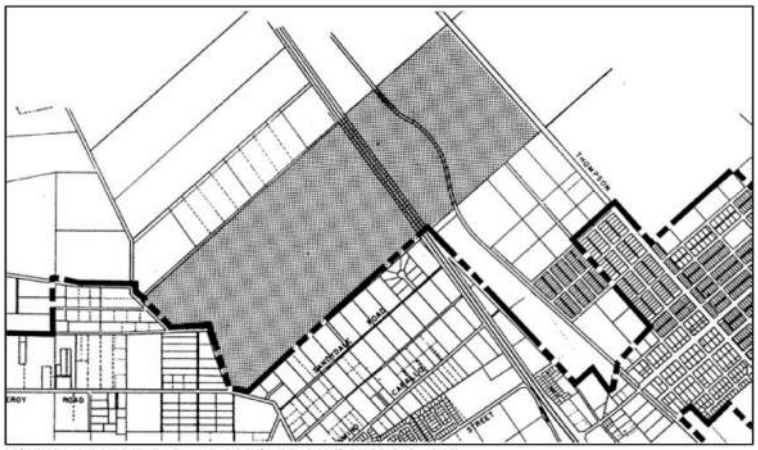

Figure 98-40: RR – Canada Ranch Property

a. *Types of uses. The concept of a Specific Plan is for uses in the following priority for acreage, scale and intensity should include the following uses:*

    1) *Open space uses within the oak woodlands;*

    2) *Industrial park(s) that will generate "basic" employment for the Nipomo and south county area;*

    3) *Commercial services parks that do not conflict with downtown and community shopping commercial uses within Nipomo;*

    4) *Retail uses to serve the daily shopping needs of employees and residents of the site in compliance with purpose and character statements for neighborhood shopping areas in Framework for Planning - Inland Area;*

    5) *Commercial retail uses that are in compliance with purpose and character statements in Framework for Planning - Inland Area for highway-oriented retail;*

    6) *Residential areas to contain a mix of housing unit types, a portion of which should be affordable to average employee incomes on the site, timing to be concurrent with or following establishment and operation of nonresidential uses, the timing to be determined by a market feasibility study.*

b. *Oak habitat preservation. Designation of the existing oak forest habitat for open space preservation, where limited recreational and open space uses may be allowed.*
c. *Pedestrian-oriented site planning. Location of workplaces, shopping, services, civic buildings, and residences in close proximity to each other to facilitate walking and alternative transportation to the private vehicle.*
d. *Architecture and landscaping. Guidelines for architecture and landscaping that respond to the rural character of the area.*
e. *Resource, facility and service needs. Extent of necessary public, or private where applicable, needs including, but not limited to, safety, health, waste management, and water supply."*

D. Policy Consistency Analysis

This is a placeholder for the policy consistency analysis that will be conducted as part of the DRSP Environmental Impact Report.

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APPENDIX B

Notice of Preparation for the Draft Environmental Impact Report and Comment Letters

Notice of Preparation

To: State Clearing
1400 10th St
Sacramento CA 95814 (Address)

From: San Luis Obispo
976 Osos St Room 200
San Luis Obispo, CA 93401 (Address)

Subject: Notice of Preparation of a Draft Environmental Impact Report

County of San Luis Obispo will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study (☒ is ☐ is not) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Jennifer Guetschow at the address shown above. We will need the name for a contact person in your agency.

Project Title: Dana Reserve Specific Plan

Project Applicant, if any: Dana Reserve, LLC

Date June 24, 2021

Signature Jennifer Guetschow Digitally signed by Jennifer Guetschow DN: C=US, E=jguetschow@co.slo.ca.us, O=San Luis Obispo, CN=Jennifer Guetschow Date: 2021.06.24 11:18:06-07'00'

Title Project Manager

Telephone 805-781-5600

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

COUNTY OF SAN LUIS OBISPO
DEPARTMENT OF PLANNING & BUILDING

PLN-1118
04/2020

Preliminary Initial Study – Environmental Checklist

Dana Reserve Specific Plan ED21-094 (PLN-1118)

Preliminary Initial Study in Support of the Project Notice of Preparation (NOP)

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The proposed project could have a "Potentially Significant Impact" for environmental factors checked below. The purpose of the following discussion is to provide a summary of the environmental impact issue areas that will be analyzed further in the proposed project Environmental Impact Report (EIR).

☒ Aesthetics	☒ Greenhouse Gas Emissions	☒ Public Services
☒ Agriculture & Forestry Resources	☒ Hazards & Hazardous Materials	☒ Recreation
☒ Air Quality	☒ Hydrology & Water Quality	☒ Transportation
☒ Biological Resources	☒ Land Use & Planning	☒ Tribal Cultural Resources
☒ Cultural Resources	☒ Mineral Resources	☒ Utilities & Service Systems
☒ Energy	☒ Noise	☒ Wildfire
☒ Geology & Soils	☒ Population & Housing	

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the Environmental Coordinator finds that:

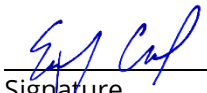
☐ The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

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

☒ The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

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

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

Emily Creel			June 23, 2021
Prepared by (Print)	Signature		Date
Jennifer Guetschow	/s/ Jennifer Guetschow		June 24, 2021
Reviewed by (Print)	Signature		Date

Preliminary Initial Study – Environmental Checklist

Project Environmental Analysis

The County's environmental review process incorporates all of the requirements for completing the Initial Study as required by the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The Initial Study includes staff's on-site inspection of the project site and surroundings and a detailed review of the information in the file for the project. In addition, available background information is reviewed for each project. Relevant information regarding soil types and characteristics, geologic information, significant vegetation and/or wildlife resources, water availability, wastewater disposal services, existing land uses and surrounding land use categories and other information relevant to the environmental review process are evaluated for each project. The County Planning Department uses the checklist to summarize the results of the research accomplished during the initial environmental review of the project.

Persons, agencies, or organizations interested in obtaining more information regarding the environmental review process for a project should contact the County of San Luis Obispo Planning Department, 976 Osos Street, Rm. 200, San Luis Obispo, CA, 93408-2040 or call (805) 781-5600.

A. Project

DESCRIPTION: A request by Dana Reserve, LLC for the adoption of a Specific Plan, Vesting Master Tentative Tract Map No. 3149 (VTTM), Conditional Use Permit, and Development Agreement to allow for the phased development of a master planned community (Project). The project would allow for the future phased development of residential uses, flex commercial uses, open space, trails, and a public neighborhood park within an approximately 300-acre specific plan area. Future proposed development of individual neighborhoods would require the submittal of additional future tract maps to further subdivide the neighborhoods into individual lots; this EIR is intended to provide CEQA streamlining and tiering benefits for those future developments.

The Dana Reserve Specific Plan (DRSP) area is located within the South County Inland sub area of the South County Planning Area (Figures 1 and 2). On January 26, 2021, the Board of Supervisors authorized a related General Plan Amendment (LRP2020-00007) to allow for the processing of the Dana Reserve Specific Plan (DRSP); to ensure consistency between the DRSP, the County General Plan, and Land Use Ordinance, Title 22 of the County Code; and to change the land use category of the site to allow for the DRSP.

The DRSP area is within the unincorporated area of San Luis Obispo County and adjacent to the Urban Reserve Line (URL) of the community of Nipomo (Figures 1 and 2) and within the sphere of influence of the Nipomo Community Services District (NCSD). The project would require annexation to the NCSD to establish new connections to existing NCSD water, and wastewater infrastructure and modification of the Nipomo URL to include the DRSP area. Annexation of the specific plan area into NCSD service area would be subject to the review and approval of the San Luis Obispo Local Agency Formation Commission (LAFCO).

The County of San Luis Obispo General Plan identifies the project site as the Canada Ranch specific plan area, which is subject to preparation and adoption of a specific plan prior to annexation of the site into the Nipomo URL to accommodate development proposals and address pertinent issues. The property is designated as an expansion area under the South County Area Plan (SCAP; Sections 4.5 and 4.8) as well as the San Luis Obispo County Code (Inland) – Title 22, Land Use Ordinance (LUO) (Section 22.98.072).

Implementation of the DRSP would provide a guide for future private and public development in conformance with requirements set forth in the California Government Code (CGC) Sections 65450 through 65457. The

DRSP would provide a bridge between the County's General Plan and specific development and subdivision plans of the property.

Project Overview

The DRSP provides a vision and would guide development of "The Dana Reserve" by defining land uses and development standards, circulation, parks and trails, and infrastructure for the future residential, commercial, and open space land uses. The DRSP also provides a phasing/implementation plan and public facility financing options to accommodate this future development. Components of the DRSP include site and building design guidelines that reflect the history of the property, a variety of housing types for developers to choose from to allow a range of opportunities for home ownership or rental; north-to-south roadway connections within the Nipomo community; implementation of an interconnected network of walking, bicycling, and equestrian facilities; the generation of new employment opportunities; and access to day-to-day goods and services.

The following goals/objectives of the DRSP have guided the design, layout, and configuration of the specific plan area:

Goal 1: Provide a mix of land uses that provides a range of amenities accessible to residents and community members. To respect Old Town Nipomo, the small, neighborhood-oriented village commercial area has been designed to complement, rather than compete with this area.

Goal 2: Provide a public neighborhood park, pocket parks, and open space areas within each residential neighborhood, linking the neighborhoods together through a network of trails and open spaces.

Goal 3: Incorporate the rural history of the community through architectural design, as guided by Appendix A of the DRSP – Design Guidelines.

Goal 4: Provide a diversity of housing types and opportunities for home ownership and apartments, including affordable homes consistent with the goals and policies of the Housing Element of the General Plan, the County's Inclusionary Housing Ordinance, and regional housing needs.

Goal 5: Create new employment and job training opportunities for the community and the broader South San Luis Obispo County area.

Goal 6: Enhance circulation within the DRSP and existing community by continuing the existing public roadway network through the property to connect to Willow Road, providing a new park and ride lot to encourage carpooling, and creating new public transportation points of connection to facilitate public transit use and reduce single-occupant automobile use.

Goal 7: Integrate a network of walking, bicycling, and equestrian facilities to connect on-site residential neighborhoods and the broader community.

Goal 8: Maintain the large, centrally located oak woodland area as a site feature. Minimize impacts to special status plants and animals on-site.

Goal 9: Meet the Building Code requirements for energy efficiencies and water savings.

County Benefits

In addition to the above DRSP goals, the San Luis Obispo County Board of Supervisors, on January 26, 2021, entered into an MOU with the applicant that states the project would have the following benefits to the County:

1. Implementing the County's stated land use goals.
2. Dedication of an Open Space easement, community park, and trail system.
3. Providing the County with anticipated increased sale tax, property tax, and transient occupancy tax revenues.
4. Providing for affordable housing in furtherance of the County's Housing Element and inclusionary housing goals and to assist in meeting the County's Regional Housing Needs Allocation.
5. Providing a portion of the site to be developed as a business park, commercial area, or such related uses, in support of the County's further economic development.
6. Permanent conservation of 388 acres of oak woodlands or similar habitat located off-site.

Land Use and Development Standards

The DRSP would allow land use designations to accommodate the future development of single-family and multi-family residential land uses within 10 identified neighborhoods, as well as commercial land uses planned near the project's frontage along U.S. Highway 101 (US 101). Anticipated commercial land uses include a village center, flex commercial uses, a neighborhood barn to accommodate events, a hotel, a daycare center, and an educational campus. The DRSP also identifies areas reserved for public recreation, neighborhood parks, trails, and open space.

The Specific Plan area consists of four parcels: one 274-acre primary parcel (APN 091-301-073) and three approximately 7-acre parcels connecting the primary parcel to Willow Road (APNs 091-301-030; 091-301-031, and 091-301-029). The parcels combined total approximately 300 acres.

The proposed land use designations are separated into three primary categories: Residential, Commercial, and Recreation and Open Space. The DRSP proposes the following land uses (Figure 3):

- Residential Land Uses
    - Residential Single-Family-1 (DR-SF1)
    - Residential Single-Family-2 (DR-SF2)
    - Residential Multi-Family (DR-MF)
- Commercial Land Uses
    - Village Commercial (DR-VC)
    - Flex Commercial (DR-FC)
- Recreation and Open Space Land Uses
    - Recreation (DR-REC)
    - Open Space (DR-OS)

An overview of proposed land uses within the DRSP is identified in **Table 1** below.

Table 1. Land Use Summary

Land Use	Acres[1]	Density Range (dwelling units/acre)	Potential Units	Potential Square Feet
Residential				
Residential Single-Family-1 (DR-RSF1) Residential Single-Family-2 (DR-RSF2)	132.6 16.9	4-7 7.5-8.5	709 124	-
Residential Multi-Family (DR-MF)	23.5	18-24	458	-
Public Park (DR-REC)	9-11	-	-	-
Pocket Parks[3]	-	-	-	-
Primary Roads	21.9	-	-	-
Residential Rural (RR) – Existing	10	-	-	-
Subtotal	**215.9**	**-**	**1,291**	**-**
Commercial and Non-Residential				
Village Commercial (DR-VC) Flex Commercial (DR-FC)	4.4 17.9	-	-	10,000–23,000 100,000–180,000
Internal Neighborhood Roads[2]	-	-	-	-
Park and Ride[3]	-	-	-	-
Subtotal	**22.3**	**-**	**-**	**110,000–203,000**
Open Space/Recreation				
Open Space (DR-OS) • Open Space • Trails • Basins	49.8	-	-	-
Subtotal	**49.8**	**-**	**-**	**-**
TOTAL	**288.0**	**-**	**1,291**	**110,000–203,000**

[1] All acreage and potential units can be adjusted up to 10% to address site-specific constraints and more suitable site design.

[2] Internal Neighborhood Roads and Pocket Parks acreage located within Residential Single-Family land use acreage calculation.

[3] Park and Ride acreage located within Public Collector Roads.

In addition to new residential, commercial, and recreation/open space uses, future buildout of the DRSP area would include internal roads, trails, and expanded utility infrastructure to serve the community. The DRSP includes goals and policies identified within the County's Housing Element and proposes a dedicated neighborhood for future development of affordable homes. The County's Accessory Dwelling Unit (ADU) Ordinance would also allow for ADUs as a permitted use in all areas of the specific plan area that allow for residential uses, consistent with State ADU law.

Phasing Improvements

There are three phases shown in the VTTM. The grading balances on-site as follows:

- **Phase 1**: Includes the Frontage Road improvements, public utility connections, onsite public roads, Frontage Road extension from Sandydale to Willow Road (Collector A) including intersections and returns for future Neighborhood connections, Cherokee Place modifications, equestrian paths, and public drainage facilities. The export from Phase 1 and 2 will be used as fill for Phase 3.

- **Phase 2**: Onsite public roads, Pomeroy to Willow Road (Collector B) including intersections, returns for future neighborhood connections, Cherokee Place modifications, equestrian/pedestrian paths, public utility connections including lift stations and public drainage facilities. The export from Phase 1 and 2 will be used as fill for Phase 3.
- **Phase 3**: Onsite public roads, public utility connections including the public park, and public drainage facilities. The export from Phase 1 and 2 will be used as fill for Phase 3.

Drainage Improvements

The existing site does not have any defined watercourses or wetlands. The topography of the site creates three distinct drainage sub-basin areas. About one-third of the specific plan area drains toward US 101, where there are three existing culverts that drain under the highway. The other two-thirds of the site trends to drain towards the west; however, because the site's soil conditions consist of highly permeable sandy soils, most of the existing site absorbs rain without any flows leaving the site.

Each development area will need to incorporate its own stormwater mitigation measures within the individual DRSP neighborhoods and commercial areas. Sample stormwater mitigation measures are described in Appendix A to the DRSP – Design Guidelines. Neighborhood and internal road sections have been designed to also include roadside LID areas to treat and mitigate runoff. Inlets and/or catch basins will also be integrated within these areas for larger storm event overflow. Storm drain inlets/culverts would be added and spaced appropriately to collect and convey large storm event overflow runoff towards proposed downstream basins. As shown in the preliminary grading scheme for the site, there are four deep stormwater basins to detain the peak runoff from the project while discharging at or below the predeveloped peak runoff generated from the 2-year event. These basins will be designed for safety with fencing where needed and fully landscaped.

Circulation

The DRSP would allow for the future development of primary roadways that connect the DRSP area to off-site roads within the vicinity to act as a continuation of County-maintained roadways. Primary roadways are identified as Collector A, Collector B, and Collector C. Additional private roadways in the DRSP include Local Road D, local roads, and motorcourts within Neighborhood 3.

Collector A – North Frontage Road

Collector A would be designed as a County-maintained public collector road and would be located in the eastern portion of the DRSP area. Collector A is proposed as an extension of the existing North Frontage Road that currently terminates near the southeast corner of the DRSP area. This road would provide a through connection from Tefft Street in the south to Willow Road to the north.

Collector B – Pomeroy to Willow Road

Collector B would be designed as a County-maintained public collector road and would be located in the western portion of the DRSP area. The roadway would provide a direct connection through the DRSP area from Pomeroy Road to Willow Road. At the proposed future Pomeroy Road connection, there would be a one-way stop intersection. Collector B would act as a functional alternative to Hetrick Avenue.

Collector C

Collector C would be designed as a County-maintained public collector road that would be located centrally within the DRSP area. It would provide a direct east-to-west connection between the planned Collector A and planned Collector B. Roundabouts are proposed at the Collector A and Collector B intersections.

Local Streets - Residential

Residential roadways would be located within the individual residential neighborhoods of the DRSP area and would vary in orientation and design. Local streets are intended to provide connection from the residential neighborhoods to collector roads and may be privately maintained by a Homeowners Association(s) (HOA).

Private Motorcourts

Private motorcourts are proposed within Neighborhood 3. Private motorcourts are private streets that would vary in orientation and are intended to provide access to adjacent local streets within the DRSP area. These roads would be privately maintained by an HOA.

Intersections and Roundabouts

The DRSP area would include five connection points to the surrounding community:

- Proposed Collector A at Willow Road: a new signalized three-way intersection (located approximately 1,000 feet west of the US 101 on-ramps)
- Proposed Collector B at Willow Road: a one-way stop-controlled intersection
- Proposed Collectors A and B at Cherokee Place: treated as a driveway
- Proposed Collector B at Pomeroy Road: a one-way stop intersection

In addition to connection points, there are two proposed roundabouts within the DRSP area. One of these roundabouts would be located along Collector A at the Village Commercial area where Collector A intersects with Collector C. The other roundabout would be located along Collector B adjacent to proposed Neighborhoods 6 and 9 where the roadway intersects with Collector C.

Emergency Access

Two additional emergency access points are proposed in the DRSP: through proposed Neighborhood 9 adjacent to Hetrick Road and through Neighborhood 7 as a continuation of Cory Way. Emergency access points would be constructed in compliance with California Department of Fire Protection and Forestry (CAL FIRE) standards.

Bicycle, Equestrian, and Pedestrian Networks

In addition to new interior roads, the DRSP identifies a bicycle network, an equestrian network, a pedestrian network, and public transit areas. The bicycle network would close existing gaps within the County's bicycle network and aims to promote non-motorized transit use within the DRSP area. An equestrian network is proposed for use by future residents of the DRSP area and other members of the community. One primary equestrian trail loop is proposed. The DRSP also includes a proposed equestrian trailhead facility in the southeast corner of the specific plan area, which would include parking for vehicles with trailers to support equestrian uses. In addition to the sidewalks on both sides of internal streets (except the private motorcourts), the proposed pedestrian network includes pedestrian trails that would provide recreational opportunities and connect the individual neighborhoods to the commercial and job areas within the DRSP area.

Public Transit

In addition, public transit stops would be included in the DRSP area to encourage transit use by DRSP residents, employees, and visitors. Public transit improvements would include a transit stop within the Village Commercial area and a park-and-ride lot along Collector A just south of Willow Road.

Utilities

Potable water and wastewater services for the DRSP area would be provided by the NCSD through an annexation into the NCSD service area. Water and wastewater would be provided via existing NCSD infrastructure within North Frontage Road, near the southeast corner of the DRSP, and expanded water and wastewater infrastructure routed within public roads throughout the specific plan area.

In addition to expanded water and wastewater services, the DRSP area would require the expansion of telecommunication, cable, electric, and natural gas utility infrastructure.

This project will be served by the following public utility providers:

- NCSD – water and wastewater
- Pacific Gas and Electric (PG&E) – electricity
- American Telephone & Telegraph Company (AT&T)/Pac-West Telecomm Inc./Satin Satellite – telephone and data
- Charter Communications – cable television
- SoCalGas – natural gas

Biological Resources

The property has several habitats that have been studied for several years by Althouse and Meade.

Oak Trees and Habitats

The development of the specific plan area has been designed to preserve the dense oak woodlands in the center of the property along with several dense clusters of historic oak trees. The oak trees throughout the rest of the site will be impacted by development of the project and will result in the removal of an estimated 99 acres of oak woodland and approximately 2.5 acres of scattered oak canopy in chaparral. Oak woodland removal and proposed mitigation will be reviewed through a Conditional Use Permit. Mitigation measures for the impact will include the offsite dedication of a 388-acre parcel known as Dana Ridge (APNs 090-301-003 and 090-301-004) with approximately 200 acres of oak woodland and 120 acres of chaparral containing scattered oaks. On-site mitigation will include planting up to 1,500 oak trees to provide approximately 24 acres of oak canopy in open space areas and as street trees. Additionally, this project will provide funds for off-site tree planting in the Nipomo area.

Pismo Clarkia

After several spring surveys, Althouse and Meade biologists identified several clusters of Pismo clarkia on the northern edge of the oak woodlands. This is a rare plant and the DRSP has been designed to protect these clusters on the site. An incidental take permit (ITP) application has been filed with the California Department of Fish and Wildlife (CDFW).

ASSESSOR PARCEL NUMBER(S): 091-301-073; 091-301-031; 091-301-030; 091-325-022; 091-301-029; 090-031-003 and 090-031-004

Latitude: 35º 02 ' 43.59" N **Longitude:** 120º 30' 01.73" W **SUPERVISORIAL DISTRICT #** 5

B. Existing Setting

Plan Area: South County **Sub:** South County Inland **Comm:** Rural

Preliminary Initial Study – Environmental Checklist

Land Use Category: Residential Rural

Combining Designation: None

Parcel Size: 288 acres

Topography: Nearly level to steeply sloping

Vegetation: Oak woodland, Chaparral, Grasses

Existing Uses: Undeveloped, seasonal grazing

Surrounding Land Use Categories and Uses:

North: Agriculture; Rural Residential; rural residences ***East:*** Agriculture; US 101; Nipomo High School

South: Residential Suburban; Commercial Service; rural residences ***West:*** Residential Suburban; rural residences

Preliminary Initial Study – Environmental Checklist

Figure 1. Project Vicinity Map

Preliminary Initial Study – Environmental Checklist

Figure 2. Project Location Map

Preliminary Initial Study – Environmental Checklist

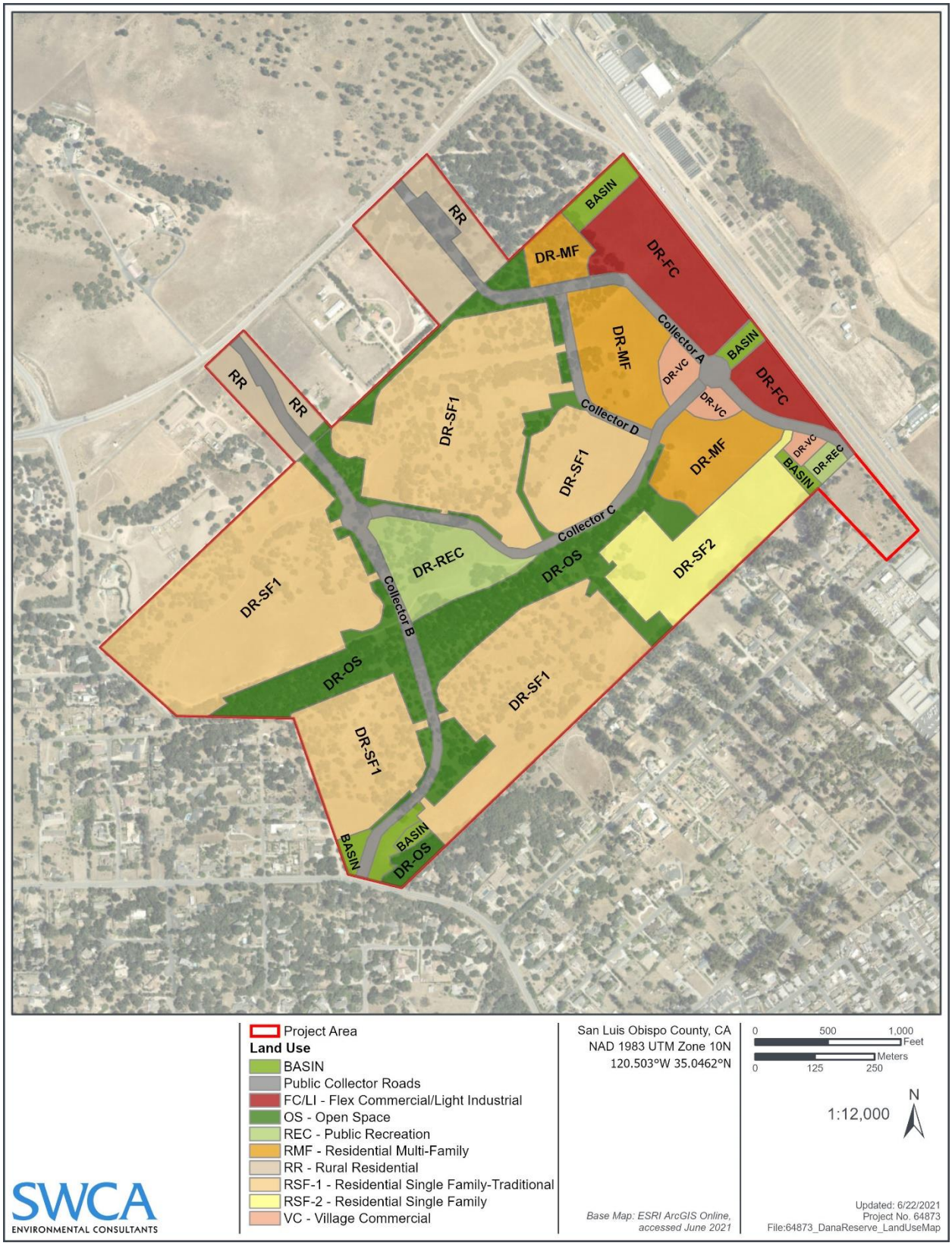


Figure 3. Proposed Land Use Map

C. Environmental Analysis

The Preliminary Initital Study Checklist provides introductory information about the potential environmental impacts of the proposed project that will be analyzed in the Environmental Impact Report (EIR).

I. AESTHETICS

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

Setting

CEQA establishes that it is the policy of the state to take all action necessary to provide people of the state "with . . . enjoyment of aesthetic, natural, scenic and historic environmental qualities" (California Public Resources Code [PRC] Section 21001(b)).

A scenic vista is generally defined as a high-quality view displaying good aesthetic and compositional values that can be seen from public viewpoints. A substantial adverse effect on a scenic vista would occur if the project would significantly degrade the scenic landscape as viewed from public roads or other public areas.

Scenic Highways within San Luis Obispo County include US 101, State Route 46 (SR 46), portions of State Route 41 (SR 41), State Route 1 (SR 1), and Lake Nacimiento Drive. The project site is located along a portion of US 101 that is listed as eligible for designation as a state scenic highway by the California Department of Transportation (Caltrans). The portion of the project site within approximately 300 feet of US 101 is subject to Highway Corridor Design Standards in Land Use Ordinance Section 22.10.095D.

The County of San Luis Obispo General Plan Conservation and Open Space Element (COSE) identifies several goals for visual resources in rural parts of the county, listed below:

- **Goal VR 1:** The natural and agricultural landscape will continue to be the dominant view in rural parts of the county.
- **Goal VR 2:** The natural and historic character and identity of rural areas will be preserved.
- **Goal VR 3:** The visual identities of communities will be preserved by maintaining rural separation between them.
- **Goal VR 7:** Views of the night sky and its constellation of stars will be maintained.

Discussion

The DRSP area is located within the viewshed of US 101, which is listed as an eligible scenic highway by Caltrans. The DRSP would allow for the future development of up to 1,290 single- and multi-family residential units, approximately 22.3 acres of commercial and light industrial development (Village Center), and approximately 64 acres of recreational uses and open space. Implementation and buildout of the DRSP would result in new development on previously undeveloped land within the viewshed of US 101. Proposed development could potentially affect scenic vistas, views from an eligible state scenic highway, visual character and quality, and nighttime views. Potential impacts related to visual resources are considered potentially significant and will be further evaluated in the EIR.

II. AGRICULTURE AND FORESTRY RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
(a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☒	☐	☐	☐
(b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐

Preliminary Initial Study – Environmental Checklist

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☒	☐
(d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐
(e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☒	☐	☐	☐

Setting

The California Department of Conservation (CDOC) Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and current land use. For environmental review purposes under CEQA, the FMMP categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land are considered "agricultural land." Other non-agricultural designations include Urban and Built-up Land, Other Land, and Water.

In addition, the County of San Luis Obispo General Plan Agriculture Element provides soil classifications based on local conditions and agricultural uses and includes policies, goals, objectives, and other requirements that apply to lands designated in the Agriculture land use category. Figure SL-1 of the COSE identifies the Nipomo Mesa, including the project site, as containing Important Agricultural Soils.

Based on the FMMP, the project site contains Farmland of Local Potential and Grazing Land (CDOC 2016). The project property is located in the Nipomo Mesa Agricultural Preserve Area; however, the property is not subject to a Williamson Act contract.

Discussion

The proposed project area is not underlain by soils classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the FMMP. However, the project area is classified as Farmland of Local Potential and Grazing Land, and the project site has been previously used for seasonal grazing. In addition, the project will be subject to the agricultural policies of LAFCO and must be evaluated under the definitions of prime agricultural land under the Cortese-Knox-Hertzberg Local Government Reorganization Act. LAFCO policies prohibit annexations of Prime Farmland unless mitigation at a substitution ratio of at least 1:1 is applied. The project will substantially increase demand for water resources, which could result in further

indirect impacts to proximate agricultural uses. Therefore, potential impacts related to agricultural resources are considered potentially significant and will be further evaluated in the EIR.

III. AIR QUALITY

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:					
(a)	Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
(b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☒	☐	☐	☐
(c)	Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
(d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☒	☐	☐	☐

Setting

Air quality is defined by the concentration of pollutants in relation to their impact on human health. Concentrations of air pollutants are determined by the rate and location of pollutant emissions released by pollution sources, and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, and sunlight. Therefore, ambient air quality conditions within the local air basin are influenced by natural factors, such as topography, meteorology, and climate, in addition to the amount of air pollutant emissions released by existing air pollutant sources.

The project site is part of the South Central Coast Air Basin, (SCCAB), which also includes Santa Barbara and Ventura Counties. Air quality within the SCCAB is regulated by several jurisdictions including the U.S. Environmental Protection Agency (EPA), California Air Resources Board (CARB), and San Luis Obispo County Air Pollution Control District (SLOAPCD).

The SLOAPCD has developed and updated their CEQA Air Quality Handbook (most recently updated with a November 2017 Clarification Memorandum) to help local agencies evaluate project-specific impacts and determine if air quality mitigation measures are needed, or if potentially significant impacts could result. This handbook includes established thresholds for both short-term construction emissions and long-term operational emissions.

Discussion

Implementation of the DRSP would allow for the phased future development of single-family residential (DR-RSF1 and DR-RSF2), multi-family residential (DR-MF), village commercial (DR-VC), flex commercial (DR-FC),

public recreation (DR-REC), and open space (DR-OS) land uses within the 300-acre DRSP area. Future construction activities would result in temporary air pollutant emissions, including ozone precursors and fugitive dust. Operation of the project would result in a substantial increase in vehicular trips to and from the site, which has the potential to increase long-term emissions of criteria air pollutants. The project has the potential to be inconsistent with the air quality goals and/or objectives of the SLOAPCD CEQA Air Quality Handbook and other applicable air quality plans. The project also has the potential to result in short-term and/or long-term air pollutant emissions in exceedance of SLOAPCD thresholds, including pollutant concentrations that could adversely affect proximate sensitive receptors. Future development of the DRSP area would have the potential to generate construction-related odors from equipment and fuels used during grading and construction activities. Therefore, potential impacts related to air quality are considered potentially significant and will be further evaluated in the EIR.

IV. BIOLOGICAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
(b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☒	☐	☐	☐
(c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
(d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐
(f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

Setting

The DRSP area and adjacent landscapes are comprised of gently rolling hills that generally slope from the highest point in elevation near Hetrick Avenue on the western portion of the site toward US 101. On-site elevations generally range from approximately 343 feet to 420 feet above mean sea level, with the lowest point adjacent to Pomeroy Road in the southwest corner of the property.

According to a Biological Report prepared for the project (Althouse and Meade, Inc. 2020), the DRSP area supports six habitat types: coast live oak woodland alliance, chamise – black sage chaparral alliance, California perennial grassland group, Mediterranean California naturalized (annual and) perennial grassland group, annual brome grasslands, and developed anthropogenic areas. Coast live oak woodland and chamise – black sage chaparral are considered sensitive natural communities. No wetlands or waters of the U.S. or state are located within the DRSP area. The nearest mapped surface water feature is Nipomo Creek located approximately 670 feet east of the DRSP area boundary on the other side of US 101.

Floristically timed botanical surveys were conducted from 2017 to 2020 and identified eight special-status plant species within the DRSP area: sand mesa manzanita, Lompoc ceanothus, Nipomo Mesa ceanothus, Pismo clarkia, mesa horkelia, California spineflower, Michael's rein-orchid, and sand almond. Though not observed during seasonal botanical surveys, habitat and soil conditions were determined suitable to support an additional 10 special-status plants. The Biological Report further identified suitable habitat for 18 special-status wildlife species, including nine special-status animals that were detected on-site: Cooper's hawk, pallid bat, oak titmouse, silver-haired bat, hoary bat, Yuma myotis, Blainvilles's (coast) horned lizard, Nuttall's woodpecker, and American badger. In addition, though not observed on-site, suitable habitat conditions were determined present capable of supporting nine additional special-status species: sharp-shinned hawk, Northern California legless lizard, burrowing owl, obscure bumble bee, western bumble bee, monarch butterflye – California overwintering population, white-tailed kite, western red bat, and Lawrence's goldfinch. The sharp-shinned hawk, Northern California legless lizard, and western red bat were determined to have moderate-to-high potential to occur on-site.

The County of San Luis Obispo Oak Woodland Ordinance was adopted in April 2017 to regulate the clear-cutting of oak woodlands. This ordinance applies to sites located outside of urban or village reserve lines within the inland portions of the county (not within the Coastal Zone). "Clear-cutting" is defined as the removal of 1 acre or more of contiguous trees within an oak woodland from a site or portion of a site for any reason, including harvesting of wood, or to enable the conversion of land to other land uses. The ordinance applies

to clear-cutting of oak woodland only and does not apply to the removal of other species of trees, individual oak trees (except for Heritage Oaks), or the thinning, tree trimming, or removal of oak woodland trees that are diseased, dead, or creating a hazardous condition.

Discussion

The project site has the potential to support special-status plant and animal species. Future construction and operational activities would have the potential to disturb special-status plant and animal species and/or sensitive habitat areas that are present within the project area.

Although the project site does not directly support identified water features, future construction activities may result in increased erosion and/or polluted stormwater runoff that could result in adverse effects to nearby wetland, riparian, or other sensitive natural communities.

The project is not located within a Wildlife Linkage area by the California Department of Fish and Wildlife (CDFW) Northern Sierra Nevada Foothills (NSNF) wildlife connectivity project (California Department of Technology 2020) or as an essential habitat connectivity area (CDFW 2010). However, the DRSP area supports oak woodlands along a ridge and other tree species that could support migratory bird species that may use the site for nesting or foraging.

County LUO Chapter 22.58 establishes regulations for clear-cutting oak woodlands. The project property supports substantial oak woodland habitat. The DRSP proposes to preserve existing oak woodlands to the extent feasible; however, future development of the DRSP area would result in impacts to oak woodlands present on-site and may result in a conflict with local policies or ordinances.

The project includes a Conditional Use Permit application for oak woodland clear-cutting as required by the County's Oak Woodland Ordinance. The project also includes the offsite dedication of a 388-acre parcel known as Dana Ridge, with approximately 200 acres of oak woodland and 120 acres of chaparral containing scattered oaks.

Future construction activities have the potential to adversely affect biological resources located within or adjacent to the project area. Potential impacts to biological resources will be further evaluated in the EIR.

V. CULTURAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☒	☐
(b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☒	☐	☐	☐
(c)	Disturb any human remains, including those interred outside of dedicated cemeteries?	☒	☐	☐	☐

Setting

San Luis Obispo County possesses a rich and diverse cultural heritage and therefore has a wealth of historic and prehistoric resources, including sites and buildings associated with Native American inhabitation, Spanish missionaries, and immigrant settlers.

According to Design Constraints Map and Background Information on Cultural Resources on the 250 Acre Canada Ranch, San Luis Obispo County, CA (Gibson's Archaeological Consulting 2005), at least one prehistoric archaeological site has been previously identified within the DRSP area. Some limited subsurface testing has been conducted within the DRSP area; however, the subsurface extent of previously identified sites is currently unknown.

Discussion

The project site is currently undeveloped; therefore, future development of the DRSP area is not expected to result in disturbance to historical buildings or structures. However, project components will disturb limited built resources (proximate roadways, utility infrastructure) that could be of historic age (though not likely to be significant historic resources).

At least one known prehistoric archaeological site has been identified within the DRSP area. Site design and layout of the property has been designed to avoid impacting this location by integrating it within open space and avoiding excavation of the resource site. However, the subsurface extent of the site has not been officially delineated; therefore, it is impossible to determine whether proposed development would avoid the site entirely. In addition, due to the limited nature of previous studies conducted at the site, there is a potential for additional sites or resources, including human remains, to be identified in other areas of the DRSP area. Development consistent with the DRSP would potentially disturb these resources, which would be considered a significant impact. Therefore, a Phase I Archaeological Survey Report will be prepared covering the entire project area, and cultural resources will be further evaluated in the EIR.

VI. ENERGY

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

Setting

Pacific Gas & Electric Company (PG&E) is the primary electricity provider for urban and rural communities within San Luis Obispo County. Approximately 39% of electricity provided by PG&E is sourced from renewable

resources and an additional 47% is sourced from non-renewable greenhouse gas (GHG)-free resources (PG&E 2019).

Southern California Gas Company (SoCalGas) is the primary provider of natural gas for urban and rural communities within San Luis Obispo County. SoCalGas has committed to replacing 20% of its traditional natural gas supply with renewable natural gas by 2030.

The COSE establishes goals and policies that aim to reduce vehicle miles traveled (VMT), conserve water, increase energy efficiency and the use of renewable energy, and reduce GHG emissions. The COSE provides the basis and direction for the development of the *County of San Luis Obispo EnergyWise Plan* (EWP), which outlines in greater detail the County's strategy to reduce government and community-wide GHG emissions through a number of goals, measures, and actions, including energy efficiency and development and use of renewable energy resources.

Discussion

Future construction activities would require the use of energy in the form of diesel fuel and gasoline for worker and construction vehicles and equipment. Implementation and full buildout of the project would result in the construction and operation of up to 1,290 residential units and 22.3 acres of commercial uses. While future development would be subject to applicable green building standards, operation of the project would potentially result in a substantial increase in the use of electricity and other energy sources on-site, which would have the potential to result in wasteful, inefficient, or unnecessary energy consumption. Therefore, potential impacts related to energy-use and consistency with applicable energy-efficiency plans will be further evaluated in the EIR.

VII. GEOLOGY AND SOILS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	☒	☐	☐	☐
	(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☒	☐	☐	☐
	(ii) Strong seismic ground shaking?	☒	☐	☐	☐
	(iii) Seismic-related ground failure, including liquefaction?	☒	☐	☐	☐

Preliminary Initial Study – Environmental Checklist

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	(iv) Landslides?	☐	☐	☒	☐
(b)	Result in substantial soil erosion or the loss of topsoil?	☒	☐	☐	☐
(c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☒	☐	☐	☐
(d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☒	☐	☐	☐
(e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
(f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐

Setting

San Luis Obispo County is in a geologically complex and seismically active region. The County of San Luis Obispo General Plan Safety Element identifies three active faults that traverse through the county and are currently zoned under the Alquist-Priolo Act: the San Andreas, the Hosgri-San Simeon, and the Los Osos. The DRSP area is located approximately 0.26 mile west of the potentially capable Santa Maria fault, 5.25 miles west of the potentially capable West Huasna fault, and 0.84 mile east of the inactive Oceano fault.

Seismic ground shaking is influenced by the proximity of the site to an earthquake fault, the intensity of the seismic event, and the underlying soil composition. Ground shaking can endanger life and safety due to damage or collapse of structures or lifeline facilities. The California Building Code (CBC) includes requirements that structures be designed to resist a certain minimum seismic force resulting from ground motion.

The County LUO identifies a Geologic Study Area (GSA) combining designation for areas where geologic and soil conditions could present new developments and/or their occupants with potential hazards to life and property. The DRSP area is not located within the County LUO GSA combining designation. Based on the Safety Element, the project site is located in an area with low landslide risk potential and moderate liquefaction potential. Based on the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) Soil Survey of the project site, on-site soils have a low potential for shrink swell.

The COSE identifies a policy for the protection of paleontological resources from the effects of development by avoiding disturbance where feasible. Where substantial subsurface disturbance is proposed in paleontologically sensitive units, Implementation Strategy CR 4.5.1 (Paleontological Studies) requires a paleontological resource assessment and mitigation plan be prepared to identify the extent and potential significance of resources that may exist within the proposed development and provide mitigation measures to reduce potential impacts to paleontological resources. The project site is underlain by Older Surficial Deposits (Qos) which contains sand of older stabilized dunes (U.S. Geological Survey [USGS] 2006).

Discussion

The DRSP area is not located near an Alquist-Priolo fault; however, it is located approximately 0.26 mile west of the potentially capable Santa Maria fault and 5.25 miles west of the potentially capable West Huasna fault. The project site has low potential for landslide and moderate potential for liquefaction to occur. Due to the project's location near identified potentially active faults, there is risk of loss, injury, or death involving seismic hazards and seismic-related ground failure. According to the USGS Areas of Land Subsidence in California Map, the project site is not located in an area with known subsidence (USGS 2021). The project site is located on sandy soil with a low shrink-swell potential (NRCS 2021).

Implementation and full buildout of the DRSP would allow for the future phased development of up to 1,290 residential units, 22.3 acres of commercial development, and associated infrastructure within the 300-acre DRSP area. The project would require grading and other earthwork that has the potential to increase soil erosion and the loss of topsoil that has the potential to result in erosive runoff. Projects that disturb more than 1 acre of soils are required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) pursuant to the State Water Resources Control Board (SWRCB) General Construction Permit. The SWPPP is required to include best management practices (BMPs) to reduce or avoid the release of erosion and other pollutants during project activities.

The project proposes annexation into the NCSD service area and would be served by the NCSD wastewater system. No septic systems are proposed; therefore, no impacts related to the site's ability to support the use of septic tanks would occur.

The project site is underlain by Older Surficial Deposits (Qos), which contains sand of older stabilized dunes (USGS 2006). Future buildout of the DRSP area would include earthwork to develop residential units and commercial buildings on the 300-acre property. The disturbance of unknown paleontological resources (if present within the project area) would be considered a potentially significant impact. Therefore, potential impacts related to geology, soils, and disturbance of paleontological resources will be further evaluated in the EIR.

VIII. GREENHOUSE GAS EMISSIONS

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

Setting

GHGs are any gases that absorb infrared radiation in the atmosphere and are different than the criteria pollutants discussed in Section III, Air Quality, above. The primary GHGs that are emitted into the atmosphere as a result of human activities are carbon dioxide (CO_2), methane (CH_4), nitrogen oxides (NOx), and fluorinated gases. These are most commonly emitted through the burning of fossil fuels (oil, natural gas, and coal), agricultural practices, decay of organic waste in landfills, and a variety of other chemical reactions and industrial processes (e.g., the manufacturing of cement).

In October 2008, the CARB published the Climate Change Proposed Scoping Plan, which is the state's plan to achieve GHG reductions in California required by Assembly Bill (AB) 32. The Scoping Plan included CARB-recommended GHG reductions for each emissions sector of the state's GHG inventory. Senate Bill (SB) 32 and Executive Order (EO) S-3-05 extended the state's GHG reduction goals and require CARB to regulate sources of GHGs to meet the following goals:

- Reduce GHG emissions to 1990 levels by 2020;
- Reduce GHG emissions to 40% below 1990 levels by 2030; and
- Reduce GHG emissions to 80% below 1990 levels by 2050.

The first update of the Scoping Plan was approved by the CARB on May 22, 2014, which looked past 2020 to set mid-term goals (2030–2035) toward reaching the 2050 goals. The most recent update released by CARB 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 EO S-3-05.

When assessing the significance of potential impacts for CEQA compliance, an individual project's GHG emissions will generally not result in direct significant impacts because the climate change issue is global in nature. However, an individual project could be found to contribute to a potentially significant cumulative impact. The EWP, adopted in 2011, serves as the County's GHG reduction strategy. The GHG-reducing policy provisions contained in the EWP were prepared for the purpose of complying with the requirements of AB 32 and achieving the goals of the AB 32 Scoping Plan, which have a horizon year of 2020. Therefore, the EWP is

not considered a qualified GHG reduction strategy for assessing the significance of GHG emissions generated by projects with a horizon year beyond 2020.

Discussion

Implementation of the DRSP would allow for the future development of DR-RSF1 and DR-RSF2, DR-MF, DR-VC, DR-FC, DR-REC, and DR-OS land uses. Future buildout would include up to 1,290 residential units and 22.3 acres of commercial uses. Heavy-duty off-road equipment, materials transport, and worker commutes during construction and build-out of the DRSP area would result in exhaust-related GHG emissions. Based on the rural location of the project site and the substantial amount of development proposed, buildout of the project would result in an increase in regional vehicle trips and/or VMT, which would contribute to and increase regional GHG emissions over the lift of the project. The DRSP includes plans for trails and a pedestrian-friendly connected community with mixed land uses that would help minimize vehicle GHG emissions within the project vicinity. However, the change in land use, increase in local population, and increase in VMT may result in a significant contribution to overall GHG emissions in the County that could conflict with applicable GHG-reduction plans. Therefore, potential impacts related to GHG emissions will be further evaluated in the EIR.

IX. HAZARDS AND HAZARDOUS MATERIALS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐
(b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☐	☐
(c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☒	☐	☐	☐
(d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐

Preliminary Initial Study – Environmental Checklist

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
(f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐
(g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☒	☐	☐	☐

Setting

The Hazardous Waste and Substances Site List (Cortese List), which is a list of hazardous materials sites compiled pursuant to California Government Code (CGC) Section 65962.5, is a planning document used by the state, local agencies, and developers to comply with CEQA requirements related to the disclosure of information about the location of hazardous materials release sites. The project is not located in an area of known hazardous material contamination and is not on a site listed on the Cortese List (SWRCB 2015; California Department of Toxic Substance Control [DTSC] 2021).

Based on the SLOAPCD Naturally Occurring Asbestos (NOA) screening map, the project is not located in an area with potential for soils containing NOA.

The County has adopted general emergency plans for multiple potential natural disasters, including the Local Hazard Mitigation Plan, County Emergency Operations Plan, Earthquake Plan, Dam and Levee Failure Plan, Hazardous Materials Response Plan, County Recovery Plan, and Tsunami Response Plan.

The California Health and Safety Code provides regulations pertaining to the abatement of fire-related hazards and requires that local jurisdictions enforce the CBC, which provides standards for fire-resistant building and roofing materials and other fire-related construction methods. The Safety Element provides a Fire Hazard Zones Map that indicates unincorporated areas in the county within moderate, high, and very high Fire Hazard Severity Zones (FHSZs). The project would be located within the State Responsibility Area (SRA) in a high FHSZ. Emergency response time to the project site is less than 5–10 minutes.

Discussion

The project site is not located within or adjacent to an area of known hazardous material contamination and is not on a site listed on the Cortese List pursuant to CGC Section 65962.5. However, implementation and buildout of the DRSP would result in development of new residential and commercial land uses on a previously undeveloped 300-acre property. Future light industrial uses may result in other potential

hazardous emissions or involve routine handling of hazardous materials. Construction and operation would likely require the use of acutely hazardous materials, including gasoline, fuel, paints, solvents, etc. These materials have the potential to result in accidental spill or upset conditions if handled, stored, or used incorrectly. The project site is located adjacent to US 101 and would allow for future grading within proximity of the roadway; therefore, the future development of the project site may result in release of aerially deposited lead. Potential impacts associated with the routine transport, use, or disposal of hazardous materials and creation of a hazard through reasonably foreseeable upset or disturbance would be considered potentially significant.

The nearest school to the project site is Nipomo High School, located 0.2 mile east of the project site, on the opposite side of US 101. Nipomo High School is located within 0.25 mile of the project site; therefore, potential impacts will be evaluated in the EIR.

The project is not located within an airport land use plan and is not located within 2 miles of any public or private airport; therefore, there would be no risk of exposing persons to a safety hazard or excessive noise from the operation of an airport.

The DRSP proposes to generally improve regional circulation by providing additional connections between Tefft Street and Willow Road and would implement additional emergency vehicle access points, street names, directional signage, and building identification within the area. However, temporary construction-related traffic and disturbances have the potential to temporarily interfere with an adopted emergency response plan or emergency evacuation plan.

The proposed project would allow for future development within high and very high FHSZs. Future development of residential and commercial areas and associated development has the potential to expose people and structures to wildfire hazards. Planned neighborhoods proposed on-site adjacent to the central oak woodland and other future development within the DRSP area would be subject to fire protection and vegetation management that is compliant with CAL FIRE and County requirements; however, any increase in the potential for wildfires in the project area as a result of implementation of the DRSP would be considered a potentially significant impact. Therefore, potential impacts related to hazards and hazardous materials will be further evaluated in the EIR.

X. HYDROLOGY AND WATER QUALITY

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☒	☐	☐	☐
(b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☒	☐	☐	☐

Preliminary Initial Study – Environmental Checklist

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☒	☐	☐	☐
	(i) Result in substantial erosion or siltation on- or off-site;	☒	☐	☐	☐
	(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☒	☐	☐	☐
	(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☒	☐	☐	☐
	(iv) Impede or redirect flood flows?	☐	☐	☒	☐
(d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
(e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☒	☐	☐	☐

Setting

The Regional Water Quality Control Board (RWQCB) *Water Quality Control Plan for the Central Coast Basin* (Basin Plan; RWQCB 2019) describes how the quality of surface water and groundwater in the Central Coast Region should be managed to provide the highest water quality reasonably possible. The Basin Plan outlines the beneficial uses of streams, lakes, and other waterbodies. There are 24 categories of beneficial uses, including, but not limited to, municipal water supply, water contact recreation, non-water contact recreation, and cold freshwater habitat. Water quality objectives are then established to protect the beneficial uses of those water resources. The RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements to individuals, communities, or businesses whose discharges can affect water quality.

The County LUO dictates which projects are required to prepare a drainage plan, including any project that would, for example, change the runoff volume or velocity leaving any point of the site, result in an impervious surface of more than 20,000 square feet, or involve hillside development on slopes steeper than 10 percent.

The County LUO also dictates that an erosion and sediment control plan is required year-round for all construction and grading permit projects and site disturbance activities of 0.5 acre or more in geologically unstable areas, on slopes steeper than 30 percent, on highly erodible soils, or within 100 feet of any watercourse.

Per the County's Stormwater Program, the County Department of Public Works is responsible for ensuring that new construction sites implement BMPs during construction, and that site plans incorporate appropriate post-construction stormwater runoff controls. Construction that disturbs 1 acre or more must obtain coverage under a SWPPP prepared per the requirements of the SWRCB Construction General Permit. Projects that disturb less than 1 acre must implement all required elements within the site's erosion and sediment control plan, as required by the County LUO.

For planning purposes, the flood event most often used to delineate areas subject to flooding is the 100-year flood. The Safety Element establishes policies to reduce flood hazards and flood damage, including, but not limited to, prohibition of development in areas of high flood hazard potential, discouragement of single-road access into remote areas that could be closed during floods, and review of plans for construction in low-lying areas. The project site is not located within or adjacent to a 100-year flood zone.

There are no surface water features located within the property.

Discussion

The DRSP area consists of relatively flat to moderately sloping topography. The property does not support any surface water features on-site and the nearest surface water feature is Nipomo Creek located 670 feet east of the DRSP boundary on the other side of US 101. Future construction activity would require grading and other earthwork that has the potential to increase erosion and sedimentation on-site. The use of construction vehicles and equipment also has the potential to increase pollution on-site that could runoff and result in degradation to sensitive on-site and proximate habitats.

Potable and non-potable water needs of the DRSP area would be supplied by the NCSD. The Santa Maria Groundwater Basin is a high-priority basin and adjudicated portions of the groundwater basin are managed by the Northern Cities Management Areas and Nipomo Mesa Management Area (County of San Luis Obispo 2019, 2021). Other major NCSD water supply sources include the State Water Project, Lopez Lake Reservoir, and recycled water from the City of Pismo Beach Wastewater Treatment Plant (WWTP) (County of San Luis Obispo 2019). Implementation and buildout of the DRSP would result in an increased demand in potable and non-potable water supplies. The NCSD has reviewed the conceptual design for the DRSP area and has determined it could supply the community with its existing water supply; the NCSD is also in the process of preparing water and wastewater capacity studies to evaluate the ability to serve the DRSP area and its effect on other NCSD systems and facilities.

The project site is not located in a 100- or 500-year flood zone and is not at risk for tsunami or seiche. However, implementation and buildout of the DRSP would result in substantial changes to existing drainage patterns and increase the amount of impervious surface area, and the rate and volume of runoff, within the DRSP area. Alteration of drainage patterns and an increase in impervious surface area on-site has the potential to increase erosion and siltation, the potential to increase surface water and stormwater runoff, and may substantially impede or redirect surface flows within the DRSP area.

Therefore, impacts related to hydrology and water quality will be further evaluated in the EIR.

XI. LAND USE AND PLANNING

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

Setting

The project property is currently located within the RR land use designation, and the DRSP area is currently under the jurisdiction of the County. The property is designated as an expansion area under SCAP Sections 4.5 and 4.8 and County LUO Section 22.98.072. The General Plan requires that a specific plan be adopted for the area.

Discussion

The project would not result in the removal or blockage of existing public roadways or other travel patterns and would not otherwise include any features that would physically divide an established community. The DRSP area is located on the northern fringe of the community of Nipomo and would provide improved regional access through the site to Willow Road. Therefore, the project is not expected to physically divide an established community.

The DRSP area is currently located within the RR land use designation. Implementation of the DRSP would result in DR-RSF1 and DR-RSF2, DR-MF, DR-VC, DR-FC, DR-REC, and DR-OS land uses. A detailed analysis of project consistency with applicable land use plans, including, but not limited to the SCAP and the General Plan, will be evaluated in the EIR.

XII. MINERAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☒	☐	☐	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(b)	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☒	☐

Setting

The California Surface Mining and Reclamation Act of 1975 (SMARA) requires that the State Geologist classify land into mineral resource zones (MRZs) according to the known or inferred mineral potential of the land (California PRC Sections 2710–2796).

The County LUO provides regulations for development in delineated Energy and Extractive Resource Areas (EX) and Extractive Resource Areas (EX1). The purpose of this combining designation is to protect significant resource extraction and energy production areas identified by the County of San Luis Obispo General Plan Land Use Element (LUE) from encroachment by incompatible land uses that could hinder resource extraction or energy production operations, or land uses that would be adversely affected by extraction or energy production. The project area is not located within an EX or EX1 combining designation.

Discussion

The County does not identify the property as an EX or EX1 zone (County of San Luis Obispo 2016). The likelihood of future mining activities on the site is low, due to the adjacent rural residential uses and proximity to Nipomo; however, there is potential for future development activities to result in the loss of availability of valuable mineral resources if present on-site. Therefore, impacts related to mineral resources will be further evaluated in the EIR.

XIII. NOISE

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Would the project result in:				
(a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
(b)	Generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐

Preliminary Initial Study – Environmental Checklist

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Setting

The County of San Luis Obispo General Plan Noise Element provides a policy framework for addressing potential noise impacts in the planning process. The purpose of the Noise Element is to minimize future noise conflicts. The Noise Element identifies the major noise sources in the county (highways and freeways, primary arterial roadways and major local streets, railroad operations, aircraft and airport operations, local industrial facilities, and other stationary sources) and includes goals, policies, and implementation programs to reduce future noise impacts. Among the most significant polices of the Noise Element are numerical noise standards that limit noise exposure within noise-sensitive land uses and performance standards for new commercial and industrial uses that might adversely impact noise-sensitive land uses.

Noise-sensitive uses that have been identified by the County include the following:

- Residential development, except temporary dwellings
- Schools (preschool to secondary, college and university, and specialized education and training)
- Health care services (e.g., hospitals, clinics, etc.)
- Nursing and personal care
- Churches
- Public assembly and entertainment
- Libraries and museums
- Hotels and motels
- Bed and breakfast facilities
- Outdoor sports and recreation
- Offices

The County LUO establishes acceptable standards for exterior and interior noise levels and describe how noise shall be measured. Exterior noise level standards are applicable when a land use affected by noise is one of the sensitive uses listed in the Noise Element. Exterior noise levels are measured from the property line of the affected noise-sensitive land use. The maximum allowable exterior noise level standards are included in **Table 2**.

Table 2. Maximum Allowable Exterior Noise Level Standards[1]

Sound Levels	Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime[2]
Hourly Equivalent Sound Level (L_{eq}) (dB)	50	45
Maximum level (dB)	70	65

Note: dB = decibel

[1] When the receiving noise-sensitive land use is outdoor sports and recreation, the noise level standards are increased by 10 db.

[2] Applies only to uses that operate or are occupied during nighttime hours.

Discussion

Construction-related noise would result in a temporary increase in ambient noise levels in the project vicinity. Based on the scale of proposed future development, associated construction activities have the potential to result in a substantial temporarily increase in ambient noise levels and groundborne noise levels within the DRSP and surrounding areas.

The project property is currently undeveloped; therefore, future buildout of new residential and commercial land uses would permanently increase ambient noise levels within the DRSP area. New sources of noise would be generated by vehicle trips to and from the project site and noise from residential and commercial land uses. A *Determination of Sound Level Contours* prepared by the project applicant (45dB Acoustics 2017) identified existing noise levels within the DRSP area adjacent to US 101 in excess of 75 decibels (dB). Therefore, the project has the potential to conflict with maximum allowable noise levels identified in the County LUO and Noise Element. The project property is not located within an Airport Land Use Plan or public or private airstrip and future development of the project would not result in exposure of airport noise to proposed commercial or residential land uses. Future construction and operation would increase ambient and groundborne noise levels in the project vicinity and would potentially conflict with policies in the County LUO and Noise Element, a potentially significant impact. Therefore, impacts related to noise and vibration will be further evaluated in the EIR.

XIV. POPULATION AND HOUSING

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

Preliminary Initial Study – Environmental Checklist

Setting

The County's current Housing Element (2020-2028) is intended to facilitate the provision of needed housing in the context of the County LUE and related ordinance. It is also intended to meet the requirements of state law. It contains a number of relevant goals, objectives, policies, and implementation programs to ensure the County meets its goals of meeting the housing needs while remaining consistent with state law.

County LUO Section 22.12.080 contains policies and procedures related to inclusionary housing that is a requirement as part of development projects. New single-family dwelling units over 2,200 square feet in size, residential subdivisions, commercial/industrial uses with a cumulative floor area of 5,000 square feet or more, mixed-use development, and subdivision of land are subject to these requirements. Projects subject to the inclusionary housing provisions are required to make 8% of the project's base density affordable.

This 8% inclusionary housing mix is broken down by 2% increments between Workforce, Moderate income, Low income, and Very Low income households. The ordinance gives applicants a variety of options for meeting this requirement, including onsite and offsite construction of affordable housing. Applicants may also opt to pay an in-lieu fee per the Affordable Housing Fund, Title 29 of the County Code. As noted in Section 22.12.080.G.2, the County provides for a reduction in required inclusionary housing by 25% for those units constructed on-site.

Requirements for inclusionary housing for residential dwelling units are based on the base density of a project. Base density is the maximum number of residential units that may be allowed, not including any density bonuses. Commercial and industrial development of 5,000 square feet or more of floor area for commercial or industrial use also requires the payment of a housing impact fee or construction of inclusionary housing units.

Discussion

The DRSP includes the future development of new single-family and multi-family residential units, commercial uses, and flex commercial/light industrial uses that could directly induce population growth. Implementation and buildout of the DRSP would be consistent with the County's housing goals but could also result in a substantial increase in population growth; therefore, impacts related to population growth will be further evaluated in the EIR.

XV. PUBLIC SERVICES

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

Setting

Fire protection services in unincorporated San Luis Obispo County are provided by CAL FIRE, which has been under contract with the County to provide full-service fire protection since 1930.

Police protection and emergency services in the unincorporated portions of the county are provided by the San Luis Obispo County Sheriff's Office. The South Station in Oceano is the closest in proximity to the DRSP area, located approximately 10 miles to the northwest.

San Luis Obispo County has a total of 12 school districts that currently enroll approximately 34,000 students in over 75 schools. The project site is located within the Lucia Mar Unified School District (LMUSD).

Within the County's unincorporated areas, there are currently 23 parks, three golf courses, four trails/staging areas, and eight Special Areas that include natural areas, coastal access, and historic facilities currently operated and maintained by the County.

Public facilities fees, Quimby fees, and developer conditions are several ways the County currently funds public services. A public facility fee program (i.e., development impact fee program) has been adopted to address impacts related to public (County) facilities and schools (CGC Section 65995 et seq.). The fee amounts are assessed annually by the County based on the type of proposed development and the development's proportional impact and are collected at the time of building permit issuance. Public facility fees are used as

needed to finance the construction of and/or improvements to public facilities required to serve new development, including fire protection, law enforcement, schools, parks, and roads.

Discussion

Implementation and buildout of the DRSP area would result in an increase in population in the Nipomo area through the future development of new single-family and multi-family residential units. Additionally, the DRSP includes future development of commercial and flex commercial/light industrial development that would increase visitors to the DRSP area. An increase in on-site population and visitor-serving uses would increase the demand on public services, including, but not limited to, fire protection, police protection, emergency services, schools, and parks. Potential impacts associated with the need for physical improvements to public services and facilities will be further evaluated in the EIR.

XVI. RECREATION

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☒	☐	☐	☐
(b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☒	☐	☐	☐

Setting

The County of San Luis Obispo General Plan Parks and Recreation Element establishes goals, policies, and implementation measures for the management, renovation, and expansion of existing parks and recreation facilities and the development of new parks and recreation facilities in order to meet existing and projected needs and to assure an equitable distribution of parks throughout the county.

Public facilities fees, Quimby fees, and developer conditions are several ways the County currently funds public parks and recreational facilities. Public facility fees are collected upon construction of new residential units and currently provide funding for new community-serving recreation facilities.

The *County Bikeways Plan* identifies and prioritizes bikeway facilities throughout the unincorporated area of the county, including bikeways, parking, connections with public transportation, educational programs, and funding (County of San Luis Obispo 2016). The Bikeways Plan is updated every 5 years and was last updated in 2016. The plan identifies goals, policies, and procedures geared towards realizing significant bicycle use as a key component of the transportation options for San Luis Obispo County residents.

Discussion

Implementation and buildout of the DRSP would result in an increase in population in the Nipomo area through the future development of new residential units, including single-family and multi-family residential units. The DRSP also includes future commercial development and flex commercial/light industrial development that could include schools or lodging facilities. A major component of the DRSP includes areas reserved for public recreation, neighborhood parks, trails, and open space. The DRSP area is anticipated to include approximately 64.1 acres of open space, which includes open space, trails, and basins, and 10 acres of public recreation, including neighborhood parks. Although the project allocates land that is designated for open space and public recreation, buildout of the proposed project would induce population growth, which could increase the demand on existing local and regional recreation facilities, including Nipomo Regional Park, located within 1,500 feet of the southwest corner of the project property. Potential future development of educational facilities and/or a lodging facility would increase the number of visitors to the area that may increase use of existing local and regional recreation facilities. Increased demand on existing recreation facilities may result in physical deterioration of existing facilities or require new or physically altered facilities. Therefore, impacts related to recreation facilities are considered potentially significant and will be further evaluated in the EIR.

XVII. TRANSPORTATION

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

Setting

The County Department of Public Works maintains updated traffic count data for all County-maintained roadways. In addition, Traffic Circulation Studies have been conducted within several community areas using traffic models to reasonably simulate current traffic flow patterns and forecast future travel demands and traffic flow patterns. These community Traffic Circulation Studies include the South County Circulation Study. Caltrans maintains annual traffic data on state highways and interchanges within the county, and the San Luis

Obispo Council of Governments (SLOCOG) holds several key roles in transportation planning within the county. As the Regional Transportation Planning Agency (RTPA), SLOCOG is responsible for conducting a comprehensive, coordinated transportation program; preparing a Regional Transportation Plan (RTP); programming state funds for transportation projects; and administering and allocating transportation development act funds required by state statutes. The 2019 RTP, adopted June 5, 2019, is a long-term blueprint of San Luis Obispo County's transportation system. The plan identifies and analyzes transportation needs of the region and creates a framework for project priorities.

In 2013, SB 743 was signed into law with the intent to "more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions" and required the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within CEQA. As a result, in December 2018, the California Natural Resources Agency certified and adopted updates to the State CEQA Guidelines. The revisions included new requirements related to the implementation of SB 743 and identified VMT per capita, VMT per employee, and net VMT as new metrics for transportation analysis under CEQA (as detailed in Section 15064.3[b]). Beginning July 1, 2020, the newly adopted VMT criteria for determining significance of transportation impacts must be implemented statewide.

The County's Framework for Planning (Inland) includes the of the County of San Luis Obispo General Plan Land Use and Circulation Elements. The framework establishes goals and strategies to meet pedestrian circulation needs by providing usable and attractive sidewalks, pathways, and trails to establish maximum access and connectivity between land use designations. In addition, projects are required to pay standard road improvement fees to address their fair share of cumulative growth impacts and future infrastructure needs.

Discussion

The project applicant prepared a Transportation Impact Study (TIS) and a Vehicle Miles Traveled (VMT) Analysis (Central Coast Transportation Consulting [CCTC] 2020) to evaluate potential transportation-related impacts of the DRSP. The TIS concluded that the project would generate 16,665 net new daily trips, including 1,133 net new AM peak hour trips and 1,334 net new PM peak hour trips. The VMT analysis concluded that the project would increase regional VMT under all analysis years, a potentially significant impact. The County evaluates project-specific VMT impacts against a threshold of 15% below the regional average, consistent with state guidance. Per the VMT analysis, the full project's VMT per service population ranges from 76–79% of the regional average, which would indicate a less-than-significant impact if this metric and the OPR guidance limiting VMT to 15% below existing levels were applied. However, the project residential VMT per capita is higher than the regional average, which would indicate a significant impact under OPR guidance. The residential-only scenario generates more VMT and results in longer trip lengths than the proposed project with mixed uses.

Therefore, impacts related to transportation are considered potentially significant and will be further evaluated in the EIR. The County has retained GHD to independently review the TIS and VMT Analysis; the results of that peer review will be used to support the analysis in the EIR.

The DRSP includes site design features designed to create a connected community including a network of pedestrian, bicycle, and equestrian trails. The proposed circulation system and improvements would also be evaluated to determine whether the project may conflict with a program plan, ordinance, or policy related to the circulation system; create or increase hazards due to geometric design or incompatible uses; and/or result in inadequate emergency access.

XVIII. TRIBAL CULTURAL RESOURCES

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

Setting

Approved in 2014, AB 52 added tribal cultural resources to the categories of resources that must be evaluated under CEQA. Tribal cultural resources are defined as either of the following:

1. Sites, features, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    a. Included or determined to be eligible for inclusion in the CRHR; or
    b. Included in a local register of historical resources as defined in California PRC Section 5020.1(k).
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth California PRC Section 5024.1(c).

Recognizing that tribes have expertise with regard to their tribal history and practices, AB 52 requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area.

Discussion

As described in Section V, Cultural Resources, there are prehistoric archaeological resources known to exist within the DRSP area. A Phase I Archaeological Survey Report will be prepared that covers the entire DRSP area, which will include outreach to local tribes. The County will also be responsible for conducting tribal outreach consistent with AB 52 and SB 18. The results of that consultation will be further evaluated and summarized in the Tribal Cultural Resources section of the EIR.

XIX. UTILITIES AND SERVICE SYSTEMS

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

Setting

The County Department of Public Works provides water and wastewater services for specific County Service Areas (CSAs) that are managed through issuance of water/wastewater "will serve" letters. The County Department of Public Works currently maintains a CSA for the community of Nipomo. Other unincorporated areas in the county rely on on-site wells and individual wastewater systems. Regulatory standards and design criteria for on-site wastewater treatment systems are provided by the Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (California OWTS Policy). The project would be served by the NCSD, subject to annexation approval.

Per the County's Stormwater Program, the County Department of Public Works is responsible for ensuring that new construction sites implement BMPs during construction and that site plans incorporate appropriate post-construction stormwater runoff controls. Construction sites that disturb 1 acre or more must obtain coverage under the SWRCB's Construction General Permit through approval of a SWPPP.

PG&E is the primary electricity provider and both PG&E and SoCalGas provide natural gas services for urban and rural communities within the county. There are three landfills in San Luis Obispo County: Cold Canyon Landfill, located near the city of San Luis Obispo; Chicago Grade Landfill, located near the community of Templeton; and Paso Robles Landfill, located east of the city of Paso Robles.

Discussion

New development would require the installation of new roadways and utility connections to serve the DRSP neighborhoods and commercial areas. The project would require new connections to existing NCSD water and wastewater services, new connections to PG&E electrical services, and other new utility connections including stormwater, natural gas, cable, telephone, and data service connections.

The project proposes new connections to NCSD potable and non-potable water supplies to serve the proposed community. According to the Draft DRSP, the total estimated potable water demand at full buildout of the project is estimated at 336.25 acre-feet per year (AFY), with a 10% contingency estimated at 369.88 AFY. An estimated 75.12 AF of the 336.25 AFY would be used for commercial development and landscaping. Implementation of the DRSP would result in a long-term increase in water demand, which is considered a potentially significant impact and will be further evaluated in the EIR.

Wastewater services would be supplied by the NCSD, subject to annexation approval. Wastewater would be collected from the DRSP area using NCSD infrastructure and would be conveyed and treated at the Southland WWTP, located approximately 2.5 miles south of the DRSP area west of US 101 on Old Windmill Place. According to the Draft DRSP, generation of wastewater at full buildout of the project is estimated to be 228.68 AFY during average flow conditions and 571.70 AFY during peak flow conditions. Implementation of the DRSP would result in an increase of wastewater and demand on NCSD infrastructure, which is considered a potentially significant impact.

Solid waste, recycling, and green waste would be serviced by South County Sanitary Services and will be disposed of at Cold Canyon Landfill. Cold Canyon Landfill has an expected close date of 2040 (California Department of Resources Recycling and Recovery [CalRecycle] 2015). South County Sanitary Services and Cold Canyon Landfill are compliant with existing state and local regulations related to disposal of solid waste. Implementation of the proposed project would result in an increase in solid waste during construction and operation. Construction waste would be similar to other development projects within the county and would result in a temporary increase in solid waste. Cold Canyon Landfill has enough permitted capacity to accommodate the temporary increase in construction-related waste. According to the Estimated Solid Waste

Generation Rates by the CalRecycle, the project may generate approximately 21,092.3 pounds of waste per day, as shown in **Table 3**.

Table 3. Estimated Solid Waste Generation Rates for the DRSP Project

Waste Generation Source	Generation Rate	Unit of Measure	Proposed Development	Total
Commercial	13	lb/1,000 sf/day	823,284 sf	10,702.7 lbs
Multi-family	5.31	lb/dwelling unit/day	458 units	2,432.0 lbs
Single-family	9.8	lb/dwelling unit/day	812 units	7,957.6 lbs
			Total	**21,092.3 lbs**

Note: lb = pound, sf = square feet

Source: CalRecycle 2019

Buildout of the DRSP area would result in a long-term increase in solid waste generation; therefore, impacts are considered potentially significant. Potential impacts related to utilities and services systems will be further analyzed in the EIR.

XX. WILDFIRE

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
(a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐
(b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☒	☐	☐	☐
(c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☒	☐	☐	☐
(d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☒	☐	☐	☐

Setting

In central California, the fire season usually extends from roughly May through October; however, recent events indicate that wildfire behavior, frequency, and duration of the fire season are changing in California. FHSZs are defined by CAL FIRE based on the presence of fire-prone vegetation, climate, topography, assets at risk (e.g., high population centers), and a fire protection agency's ability to provide service to the area (CAL FIRE 2007). FHSZs throughout the county have been designated as "Very High," "High," or "Moderate." The project would be located within the SRA in high and very high FHSZs (CAL FIRE 2021). Emergency response to the project site is less than 10 minutes.

The *San Luis Obispo County Emergency Operations Plan* (EOP) addresses several overall policy and coordination functions related to emergency management. The Safety Element establishes goals, policies, and programs to reduce the threat to life, structures, and the environment caused by fire. Policy S-13 identifies that new development should be carefully located, with special attention given to fuel management in higher fire risk areas, and that new development in fire hazard areas should be configured to minimize the potential for added danger.

The California Fire Code provides minimum standards for many aspects of fire prevention and suppression activities. These standards include provisions for emergency vehicle access, water supply, fire protection systems, and the use of fire-resistant building materials.

Discussion

The DRSP area is located within high and very high FHSZs (CAL FIRE 2021). Topography of the project area is relatively flat to moderately sloping. The average windspeed of the project area is 7 to 9.5 miles per hour year-round (WeatherSpark 2021). The proposed project would result in future development areas within high and very high FHSZs. Proposed neighborhoods 3, 7, 8, and 9 are anticipated to be located adjacent to the central oak woodland present on-site.

Future development of residential and commercial areas and associated development has the potential to expose people and structures to wildfire hazards. In addition, on-site construction and operational activities have the potential to increase the risk or severity of wildfire hazards of the DRSP area and surrounding areas. Although the project proposes to implement fire protection and vegetation management measures, impacts associated with new development within high and very high FHSZs are considered potentially significant and will be further evaluated in the EIR.

California
Department of Conservation
Geologic Energy Management Division

Gavin Newsom, Governor
David Shabazian, Director
801 K Street, MS 18-05
Sacramento, CA 95814
T: (916) 445-9686

07/20/2021

County: San Luis Obispo - Planning & Building
Jennifer Guetschow
976 Osos Street, San Luis Obispo, CA 93408, USA

Construction Site Well Review (CSWR) ID: 1012271

Assessor Parcel Number(s): 091301073, 091301030, 091301031

Property Owner(s): Dana Reserve, LLC

Project Location Address: Willow Road and Cherokee Place, California, 93444

Project Title: Dana Reserve Specific Plan

Public Resources Code (PRC) § 3208.1 establishes well reabandonment responsibility when a previously plugged and abandoned well will be impacted by planned property development or construction activities. Local permitting agencies, property owners, and/or developers should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near oil, gas, and geothermal wells.

The California Geologic Energy Management Division (CalGEM) has received and reviewed the above referenced project dated 7/20/2021. To assist local permitting agencies, property owners, and developers in making wise land use decisions regarding potential development near oil, gas, or geothermal wells, the Division provides the following well evaluation.

The project is located in San Luis Obispo County, within the boundaries of the following fields:

Our records indicate there are 0 known oil or gas wells located within the project boundary as identified in the application.

- Number of wells Not Abandoned to Current Division Requirements as Prescribed by Law and Projected to Be Built Over or Have Future Access Impeded by this project: 0
- Number of wells Not Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 0
- Number of wells Abandoned to Current Division Requirements as Prescribed by Law and Projected to Be Built Over or Have Future Access Impeded by this project: 0
- Number of wells Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 0

As indicated in PRC § 3106, the Division has statutory authority over the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells, and attendant facilities, to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil,

Gavin Newsom, Governor
David Shabazian, Director
801 K Street, MS 18-05
Sacramento, CA 95814
T: (916) 445-9686

gas, and geothermal deposits; and damage to underground and surface waters suitable for irrigation or domestic purposes. In addition to the Division's authority to order work on wells pursuant to PRC §§ 3208.1 and 3224, it has authority to issue civil and criminal penalties under PRC §§ 3236, 3236.5, and 3359 for violations within the Division's jurisdictional authority. The Division does not regulate grading, excavations, or other land use issues.

If during development activities, any wells are encountered that were not part of this review, the property owner is expected to immediately notify the Division's construction site well review engineer in the Coastal district office, and file for Division review an amended site plan with well casing diagrams. The District office will send a follow-up well evaluation letter to the property owner and local permitting agency.

Should you have any questions, please contact me at (661) 334-3665 or via email at Rohit.Sharma@conservation.ca.gov

Sincerely,

Rohit Sharma

Rohit Sharma
Acting Coastal District Deputy

[EXT]Dana Reserve Draft EIR

Martin, Jordan@DOC <Jordan.Martin@conservation.ca.gov>

Mon 7/19/2021 1:33 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Hello Jennifer,

Thank you for notifying CalGEM of the above project. Can you please provide the contact information for the property owner Dana Reserve, LLC C/O Nick Tompkins (phone number, mailing address, email, etc). The CalGEM response will be sent to you, but the property owner contact information is required for CalGEM's review form.

Thank you,

Jordan Martin, P.G.
Associate Oil & Gas Engineer | Coastal District

California Department of Conservation
Geologic Energy Management Division
195 S Broadway, Suite 101, Orcutt, CA 93455
T: (805) 465-9638
E: Jordan.Martin@conservation.ca.gov

LAFCO - San Luis Obispo - Local Agency Formation Commission
SLO LAFCO - Serving the Area of San Luis Obispo County

July 20, 2021

County of San Luis Obispo
976 Osos St. Room 200
San Luis Obispo ,CA 93408
ATTN: Jennifer Guetschow, Senior Planner

Subject: Notice of Preparation for an Environmental Impact Report (EIR) regarding the Dana Reserve Project

Dear Jennifer Guetschow:

Thank you for the opportunity to provide comments regarding the scope and content of the draft EIR for the Dana Reserve Project. It is our understanding that the project would be served by the Nipomo Community Services District (NCSD) and is currently located within the Sphere of Influence of the NCSD. However, the project is not currently within the service area of NCSD and therefore an annexation into NCSD would be required prior to NCSD serving the project. Annexations are subject to the approval of the Local Agency Formation Commission (LAFCO). Once the project has been approved by the Board of Supervisors, an application will need to be submitted to LAFCO for approval of the annexation. In this circumstance, LAFCO intends to act as the Responsible Agency for the project and may use the EIR and other project materials for considering an annexation of the project into the NCSD. Please also note that LAFCO has specific application requirements beyond those necessary for CEQA purposes.

Please consider the following comments when drafting the EIR:

1. **Name of Contact Person.** Rob Fitzroy, Executive Officer, San Luis Obispo Local Agency Formation Commission, 1042 Pacific Street, Suite A, San Luis Obispo, CA 93401. (805) 788-2096.

2. **Permit(s) or Approval(s) Authority.** Under the Cortese, Knox, Hertzberg Act (CKH) of 2000, LAFCO is responsible, in part, for annexation approvals for jurisdictions throughout the County. A proposed annexation would be subject to LAFCO's local policies and procedures which can be found on our website at www.slolafco.com. These policies and procedures should be reviewed as part of the CEQA process if the EIR is to be adequate for LAFCO to use as a Responsible Agency in considering the project. Of particular note are prime farmland definitions and preservation policies for any loss of prime agricultural land. CKH Act defines prime farmland differently that other State criteria. Additionally, specific findings must be made by LAFCO related to the provision of affordable housing for a wide range of demographics.

3. **Environmental Information.** In order to consider the annexation of the area into the NCSD, an adequate environmental document must be prepared for LAFCO's use. To expedite LAFCO's approval process, the EIR should address the potential environmental impacts of adding this area to the NCSD. The EIR should address the capability of the NCSD to provide public services to existing and future residents with regard to sewer capacity and demand and financial constraints and opportunities to funding the necessary improvements. The project description should include information about the LAFCO process and need for approval of annexation.

4. **LAFCO Agricultural, Water and Housing Policies.** As noted above, please refer to the goals, policies, and guidelines of LAFCO regarding Agricultural Resources, Water and Housing. These policies should be reviewed and analyzed or consistency with the proposed project. A key policy to be considered is the 1:1 substitution ratio to preserve prime agricultural land. Housing policies for affordable housing should be reviewed and analyzed. Lastly, LAFCO policies require the substantiation of a reliable, adequate and sustainable water supply.

5. **Mitigation Measures.** Mitigation Measures that assist LAFCO in achieving its legislative goals such as reducing the impacts to agriculture and open space should be considered. While LAFCO has discretion over the annexation proposal, mitigation measures that reduce impacts to resources assist LAFCO in the decision making process and should be referenced in this section.

6. **Alternatives.** Any analysis of alternatives should include an evaluation of the impacts the proposed annexation might have on the environment. LAFCO has the discretion to modify a boundary change proposal.

We appreciate being contacted with regard to this project and look forward to hearing more about the plan as it progresses through the environmental review and planning process. If you have any questions regarding our comments please contact me at 788-2096.

Sincerely,

Rob Fitzroy

Rob Fitzroy,
LAFCO Executive Officer

Enc.
cc. Commissioners
Brian Pierik, LAFCO Legal Counsel

LUCIA MAR UNIFIED SCHOOL DISTRICT

Engage.Challenge.Inspire

BUSINESS SERVICES DEPARTMENT
Jim Empey
Assistant Superintendent, Business Services
602 Orchard Street, Arroyo Grande, CA 93420
Tel 805.474.3000 x1070 | Fax 805.473.1593

July 20, 2021

By U.S. Mail & E-Mail: jguetschow@co.slo.ca.us

County of San Luis Obispo
Jennifer Guetschow, Senior Planner
976 Osos Street, Room 200
San Luis Obispo, CA 93408

Re: Response of Lucia Mar Unified School District to Notice of Preparation of Environmental Impact Report for the Dana Reserve Specific Plan

Dear Ms. Guetschow:

Lucia Mar Unified School District ("District") appreciates the opportunity to provide comments and input regarding the Notice of Preparation of the Environmental Impact Report that the County of San Luis Obispo ("County") plans to prepare for the Dana Reserve Specific Plan ("Project"). Specifically, this letter responds to the County's invitation to submit comments on the proposed scope and content of the Environmental Impact Report ("EIR").

It is our understanding that the Project is proposed to include over 1,400 residential units and approximately 200,000 square feet of commercial space. It goes without saying that the Project will generate hundreds of new students, creating significant impacts on the District. Any environmental analysis related to the proposed Project must address potential effects related to traffic, noise, air quality, and any other issues affecting schools. (Pub. Resources Code, §§ 21000, *et seq.*; Cal. Code Regs., tit. 14, §§ 15000, *et seq.*; *Chawanakee Unified School District v. County of Madera, et al.*, (2011) 196 Cal.App.4th 1016.)

We will continue to work with the Project applicant to resolve issues related to the Project and its impacts on the District. In the meantime, the District desires to engage the County through the CEQA process, as we remain concerned about the significant impacts that this Project will undoubtedly have on the District. The District therefore requests that the County address the following categories of information in the EIR to adequately evaluate the potential environmental impacts of this Project:

1. **Describe the existing and the anticipated vehicular traffic and student pedestrian movement patterns to and from school sites.**

2. **Assess the impact(s) of increased vehicular movement and volumes caused by the Project, including but not limited to potential conflicts with school pedestrian movement, school transportation, and busing activities.**

3. **Estimate travel demand and trip generation, trip distribution, and trip assignment by including consideration of school sites and home-to-school travel.**

4. **Assess cumulative impacts on schools and the community in general resulting from increased vehicular movement.**

5. **Discuss the direct, indirect, and cumulative impacts on the circulation and traffic patterns in the community as a result of traffic generated by the transportation needs of students to and from the Project.**

6. **Assess the impacts on the routes and safety of students traveling to school by vehicle, bus, walking, and bicycles.**

7. **Identify any noise sources and volumes which may affect school facilities, classrooms and outdoor school areas.**

8. **Describe historical, current, and future population projections for the District.**

9. **Assess the impacts of population growth within the District on the District's ability to provide its educational program.**

10. **Describe the type and number of anticipated dwelling units indirectly resulting from the Project.**

11. **Describe the average square footage for anticipated dwelling units, broken down by type of unit, indirectly resulting from the Project.**

12. **Estimate the amount of development fees to be generated by development in accordance with implementation of the Project.**

The foregoing categories of information are critical for determining the extent of both physical and fiscal impacts on the District caused by increased population growth. California school districts are dependent on developer fees authorized by the provisions of Government Code Sections 65995, *et seq.*, and Education Code sections 17620, *et seq.*, for financing new school facilities and maintenance of existing facilities. These funding concerns translate directly into physical, environmental impacts, in that inadequate funding for new school construction results in overcrowding of existing facilities. Furthermore, fiscal and social considerations are relevant to an EIR, particularly when they either contribute to or result from physical impacts. (Pub. Resources Code § 21001(g); 14 Cal. Code Regs. §§ 15021(b), 15131(a)-(c), 15142 & 15382.)

Phasing of development is also a crucial consideration in determining the extent of impact on schools. The timing of the development will determine when new students are expected to be generated, and therefore is an important consideration particularly when considering the cumulative impact of a project in conjunction with other approved or pending development.

Conclusion

District does not oppose development within District boundaries, and recognizes the importance of housing on the health and welfare of the community. However, the District maintains that the community can only thrive if the District's educational program and its facilities are viable and sufficient, and District staff, families, and students are safe. Accordingly, the needs of the District must be appropriately considered in the environmental review process for all proposed new development that will impact the District, such as the Project.

The District is hopeful that its continued collaboration with the Project applicant and the County will yield solutions that alleviate the impacts caused by the Project, and is prepared to provide any information necessary to assist the County in preparation of the EIR.

Please feel free to contact me directly if we can be of any assistance.

Sincerely,

Jim Empey
Assistant Superintendent, Business Services

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Ave
Fresno, California 93710
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

July 23, 2021

Jennifer Guetschow
Project Manager
County of San Luis Obispo Planning and Building Department
976 Osos Street
San Luis Obispo, California 93401

Subject: Dana Reserve Specific Plan (Project)
Notice of Preparation (NOP) of an Environmental Impact Report (EIR)
SCH No.: 2021060558

Dear Ms. Guetschow:

The California Department of Fish and Wildlife (CDFW) received a NOP of an EIR from County of San Luis Obispo Planning and Building Department for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

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

CDFW ROLE

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

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code may be required.

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include, sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

PROJECT DESCRIPTION SUMMARY

Proponent: Dana Reserve, LLC

Objective: The Project consists of an adoption of a Specific plan, vesting master tentative tract map number 3149, conditional use permit, and development agreement for a phased master planned community. The objective of the Project is to define a guide for development of the Reserve, by defining land use and development standards for residential, commercial, and open space land uses.

Location: The Project area is located within the unincorporated area of San Luis Obispo County and adjacent to the Urban Reserve Line of the community of Nipomo. The cross streets are Willow Road and Highway 101. The Project is a total of 288-acres.

- Longitude: 35° 2' 43.59"; Latitude: -120° 30' 1.73"
- Assessor's Parcel Numbers: 091-301-073; 091-301-031; 091-301-030; 091-325-022; 091-301-029; 090-031-003

Timeframe: Unspecified

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist County of San Luis Obispo Planning and Building Department in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document. There are many special-status resources present within and adjacent to the Project area. These resources may need to be evaluated and addressed prior to any approvals that would allow ground-disturbing activities or land use changes.

The NOP indicates there is potential for significant impacts unless mitigation measures are implemented, however, the measures listed are general and non-specific and/or may be inadequate to reduce impacts to less than significant. CDFW is concerned regarding potential impacts to special-status species including, but not limited to: Federal candidate Monarch butterfly (*Danaus plexippus pop. 1*), the State species of special concern and federally threatened California red-legged frog (*Rana draytonii*), State species of special concern American badger (*Taxidea taxus*), burrowing owl (*Athene cunicularia*), western spadefoot (*Spea hammondii)*, legless lizard (*Anniella pulchra*), coast horned lizard (*Phrynosoma blainvillii*), special-status bat species, and federally and State-listed special-status plant species.

In order to adequately assess any potential impacts to biological resources, CDFW recommends that focused protocol-level surveys be conducted by a qualified wildlife biologist/botanist during the appropriate survey period(s) in order to determine whether any special-status species and/or suitable habitat features are present within the Project area. Properly conducted biological surveys, and the information assembled from them, are essential to identify any mitigation, minimization, and avoidance measures and/or the need for additional or protocol-level surveys, especially in the areas not in irrigated agriculture, and to identify any Project-related impacts under CESA and other species of concern.

Additionally, when an EIR is prepared, mitigation measures must be specific and clearly defined and cannot be deferred to a future time. The specifics of mitigation measures may be deferred, provided the lead agency commits to mitigation and establishes performance standards for implementation, when an EIR is prepared. The CEQA document must provide quantifiable and enforceable measures as needed that will reduce impacts to less than significant levels.

I. Environmental Setting and Related Impact
Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or United States Fish and Wildlife Service (USFWS)?

COMMENT 1: Monarch Butterfly

Issue: Monarchs can be found overwintering along the California coast, specifically in non-native eucalyptus trees (Pelton 2016). Project-related activities have the potential to impact special-status species. Overwintering monarchs have been documented to occur near the Project area (CDFW 2021). CDFW recommends that the EIR includes an impact analysis on monarchs with the potential to occur in the Project area.

Specific impact: Without appropriate avoidance and minimization measures for the species mentioned above, potential significant impacts associated with the Project's construction include roost destruction, inadvertent entrapment, reduced reproductive

success, reduction in health and vigor of eggs and/or young, and direct mortality of individual monarchs.

Evidence impact would be significant: During the last decade overwintering monarch populations have declined by nearly 90-percent (Jepsen et al. 2015). Habitat loss and fragmentation is among the primary threats to the population (USFWS 2020). Project activities have the potential to significantly impact the species by reducing possible roosting habitat.

Recommended Potentially Feasible Mitigation Measure(s)
To evaluate potential impacts of the Project to special-status species, CDFW recommends conducting the following assessment of the Project area, including the following mitigation measures, and requiring them as conditions of approval in the Project's EIR.

Recommended Mitigation Measure 1: Monarch Butterfly Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment, well in advance of Project implementation, to determine if individual project area or its immediate vicinity contain habitat suitable to support monarchs.

Recommended Mitigation Measure 2: Monarch Butterfly Surveys

If suitable habitat is present, CDFW recommends assessing presence of monarchs by conducting surveys following recommended protocols or protocol-equivalent surveys.

Recommended Mitigation Measure 3: Monarch Butterfly Take Avoidance

Detection of monarchs within or in the vicinity of the Project area, warrants consultation with CDFW and USFWS to discuss how to implement ground-disturbing activities and avoid take.

COMMENT 2: American Badger

Issue: American badger are known to occur in the area near the Project site (CDFW 2021). Badgers occupy sparsely vegetated land cover with dry, friable soils to excavate dens, which they use for cover, and that support fossorial rodent prey populations (i.e. ground squirrels, pocket gophers, etc.) (Zeiner et al. 1990). The Project site may support these requisite habitat features. Therefore, the Project has the potential to impact American badger.

Specific impact: Without appropriate avoidance and minimization measures for American badger, potentially significant impacts associated with ground disturbance include direct mortality or natal den abandonment, which may result in reduced health or vigor of young.

Evidence impact is potentially significant: Habitat loss is a primary threat to American badger (Gittleman et al. 2001). The Project has the expectation to promote the growth of the City of Nipomo, resulting in a high degree of land conversion and potential habitat fragmentation. As a result, ground-disturbing activities have the potential to significantly impact local populations of American badger.

Recommended Potentially Feasible Mitigation Measure(s):
To evaluate potential impacts to American badger associated with the Project, CDFW recommends conducting the following evaluation of the Project sites, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 4: American Badger Surveys

If suitable habitat is present, CDFW recommends that a qualified biologist conduct focused surveys for American badger and their requisite habitat features (dens) to evaluate potential impacts resulting from ground- and vegetation-disturbance.

Recommended Mitigation Measure 5: American Badger Avoidance

Avoidance whenever possible is encouraged via delineation and observation of a 50-foot no-disturbance buffer around occupied dens and a 250-foot no-disturbance buffer around natal dens until it is determined through non-invasive means that individuals occupying the den have dispersed.

COMMENT 3: California Red-Legged Frog (CRLF)

Issue: CRLF primarily inhabit ponds but can also be found in other waterways including marshes, streams, and lagoons, and the species will also breed in ephemeral waters (Thomson et al. 2016). CRLF have been documented to occur in the vicinity of the Project site (CDFW 2021). The Project site contains upland habitat that may support the species. Avoidance and minimization measures are necessary to reduce impacts to CRLF to a level that is less than significant.

Specific impact: Without appropriate avoidance and minimization measures for CRLF, potentially significant impacts associated with the Project's activities include loss of upland refugia, inadvertent entrapment, destruction of eggs and oviposition (i.e., egg-laying) sites, degradation of water quality, reduced reproductive success, reduction in health and vigor of eggs, larvae and/or young, and direct mortality of individuals.

Evidence impact would be significant: CRLF populations throughout the State have experienced ongoing and drastic declines and many have been extirpated (Thomson et al. 2016). Habitat loss from growth of cities and suburbs, invasion of nonnative plants, impoundments, water diversions, stream maintenance for flood control, degraded water quality, and introduced predators, such as bullfrogs are the primary threats to CRLF

(Thomson et al. 2016, USFWS 2017). Project activities have the potential to significantly impact CRLF.

Recommended Potentially Feasible Mitigation Measure(s)
To evaluate potential impacts to CRLF, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 6: CRLF Surveys

CDFW recommends that a qualified wildlife biologist conduct protocol level surveys for CRLF in areas where potential habitat exists. CDFW recommends surveys in accordance with the "Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog" (USFWS 2005) to determine if the species is within or adjacent to the Project area. Please note that dip-netting would constitute take as defined by Fish and Game Code section 86, so it is recommended this survey technique be avoided. In addition, CDFW advises surveyors adhere to Appendix E "The Declining Amphibian Task Force Fieldwork Code of Practice," of the CDFW "Considerations for Conserving the Foothill Yellow-Legged Frog" (CDFW 2018a).

Recommended Mitigation Measure 7: CRLF Avoidance

If any CRLF are found during pre-construction surveys or at any time during construction, consultation with CDFW is warranted to determine if the Project can avoid take. CDFW recommends that initial ground-disturbing activities be timed to avoid the period when CRLF are most likely to be moving through upland areas (October 15 and May 1). When ground-disturbing activities must take place between October 15 and May 1, CDFW recommends a qualified biologist monitor construction activity daily for CRLF.

COMMENT 4: Burrowing Owl (BUOW)

Issue: The Project location is within the known range of BUOW and the species occurs throughout the area (CDFW 2021). BUOW inhabit open grassland or adjacent canal banks, rights-of-ways (ROWs), vacant lots, etc. containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover. Review of aerial imagery indicates that the Project site has annual grassland, thus BUOW has the potential to occur on the Project site.

Specific impact: Potentially significant direct impacts associated with subsequent activities include burrow collapse, inadvertent entrapment, nest abandonment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

Evidence impact is potentially significant: BUOW rely on burrow habitat year-round for their survival and reproduction. Habitat loss and degradation are considered the greatest threats to BUOW in California (Gervais et al. 2008). The Project site is some of the only remaining undeveloped land in the vicinity, which is otherwise intensively managed for agriculture and residential use. Therefore, subsequent ground-disturbing activities associated with the Project have the potential to significantly impact local BUOW populations. In addition, and as described in CDFW's "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), excluding and/or evicting BUOW from their burrows is considered a potentially significant impact under CEQA.

Recommended Potentially Feasible Mitigation Measure(s)
To evaluate potential impacts to BUOW, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 8: BUOW Surveys

CDFW recommends that a qualified biologist assess if suitable BUOW habitat features are present within or adjacent to the Project site (e.g., burrows). If suitable habitat features are present, CDFW recommends assessing presence/absence of BUOW by having a qualified biologist conduct surveys following the California Burrowing Owl Consortium's "Burrowing Owl Survey Protocol and Mitigation Guidelines" (CBOC 1993) and CDFW's Staff Report on Burrowing Owl Mitigation" (CDFG 2012). Specifically, CBOC and CDFW's Staff Report suggest three or more surveillance surveys conducted during daylight with each visit occurring at least three weeks apart during the peak breeding season (April 15 to July 15), when BUOW are most detectable.

Recommended Mitigation Measure 9: BUOW Avoidance

CDFW recommends no-disturbance buffers, as outlined in the "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), be implemented prior to and during any ground-disturbing activities. Specifically, CDFW's Staff Report recommends that impacts to occupied burrows be avoided in accordance with the following table unless a qualified biologist approved by CDFW verifies through non-invasive methods that either: 1) the birds have not begun egg laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting sites	April 1-Aug 15	200 m*	500 m	500 m
Nesting sites	Aug 16-Oct 15	200 m	200 m	500 m
Nesting sites	Oct 16-Mar 31	50 m	100 m	500 m

* meters (m)

Recommended Mitigation Measure 10: BUOW Passive Relocation and Mitigation

If BUOW are found within these recommended buffers and avoidance is not possible, it is important to note that according to the Staff Report (CDFG 2012), exclusion is not a take avoidance, minimization, or mitigation method and is considered a potentially significant impact under CEQA. However, if necessary, CDFW recommends that burrow exclusion be conducted by qualified biologists and only during the non-breeding season, before breeding behavior is exhibited and after the burrow is confirmed empty through non-invasive methods, such as surveillance. CDFW recommends replacement of occupied burrows with artificial burrows at a ratio of 1 burrow collapsed to 1 artificial burrow constructed (1:1) as mitigation for the potentially significant impact of evicting BUOW. BUOW may attempt to colonize or re-colonize an area that will be impacted; thus, CDFW recommends ongoing surveillance, at a rate that is sufficient to detect BUOW if they return.

COMMENT 5: Western spadefoot

Issue: Western spadefoot inhabit grassland habitats, breed in seasonal wetlands, and seek refuge in upland habitat where they occupy burrows outside of the breeding season (Thomson et al. 2016). Review of aerial imagery indicates that the Project contains upland habitat and near vicinity of the site there are other habitat elements where the species could be supported.

Specific impact: Without appropriate avoidance and minimization measures for western spadefoot, potentially significant impacts associated with ground disturbance include; collapse of small mammal burrows, inadvertent entrapment, loss of upland refugia, water quality impacts to breeding sites, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

Evidence impact is potentially significant: Habitat loss and fragmentation resulting from agricultural and urban development is the primary threat to western spadefoot (Thomson et al. 2016). The Project area is within the range of western spadefoot, contains suitable upland habitat (i.e., grasslands interspersed with burrows) and near possible breeding sites (i.e., seasonal wetlands, vernal pools and swales). As a result, ground-disturbing activities associated with development of the Project site have the potential to significantly impact local populations of this species.

Recommended Potentially Feasible Mitigation Measure(s)
To evaluate potential impacts to western spadefoot associated with the Project, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 11: Western Spadefoot Surveys

CDFW recommends that a qualified biologist conduct focused surveys for western spadefoot and their requisite habitat features to evaluate potential impacts resulting from ground- and vegetation-disturbance.

Recommended Mitigation Measure 12: Western Spadefoot Avoidance

Avoidance whenever possible is encouraged via delineation and observance of a 50-foot no-disturbance buffer around burrows. If western spadefoot are observed on the Project site, CDFW recommends that Project activities in their immediate vicinity cease and individuals be allowed to leave the Project site on their own accord. Alternatively, a qualified biologist with appropriate take authorization can move them out of harm's way and to a suitable location.

COMMENT 6: Other Special-Status Species

Issue: Project-related activities have the potential to impact other special-status species. Northern California legless lizard, coast horned lizard, Pallid bat, Townsend's big-eared bat, and western mastiff bat has the potential to occur within the vicinity of the Project area (CDFW 2021). CDFW recommends that the CEQA document includes an impact analysis on all species with the potential to occur in the Project area including, but not limited to, these species listed above.

Specific impact: Without appropriate avoidance and minimization measures for the species mentioned above, potential significant impacts associated with the Project's construction include burrow or den collapse, nest or roost destruction, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individual special-status wildlife species.

Evidence impact would be significant: Habitat loss resulting from development is among the primary threats to special-status species. As a result, ground disturbance resulting from development of the Project has the potential to impact habitat that supports special-status species, which may result in significant impacts to local populations of these species.

Recommended Potentially Feasible Mitigation Measure(s)
To evaluate potential impacts of the Project to special-status species, CDFW recommends conducting the following assessment of the Project area, including the following mitigation measures, and requiring them as conditions of approval in the Project's CEQA document.

Recommended Mitigation Measure 13: Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment, well in advance of Project implementation, to determine if individual project areas or their immediate vicinity contain habitat suitable to support special-status plant or animal species, including, but not limited to, those mentioned above.

Recommended Mitigation Measure 14: Species-Specific Surveys

If suitable habitat is present, CDFW recommends assessing presence/absence of special-status species by conducting surveys following recommended protocols or protocol-equivalent surveys. Recommended protocols vary by species. More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (https://www.wildlife.ca.gov/Conservation/Survey-Protocols).

Recommended Mitigation Measure 15: Take Avoidance

Detection of special-status plant or animal species within or in the vicinity of the Project area, warrants consultation with CDFW to discuss how to implement ground-disturbing activities and avoid take.

Recommended Mitigation Measure 16: Take Authorization

In the case of State-listed species, detection warrants consultation with CDFW to discuss how to avoid take, or if avoidance is not feasible, to acquire an incidental take permit (ITP) prior to ground-disturbing activities, pursuant to Fish and Game Code section 2081 subdivision (b).

COMMENT 7: Special-Status Plant Species

Issue: Several special-status plant species have been documented to occur within and near the vicinity of the Project area (CDFW 2021). The Project site contains habitat suitable to support numerous special-status plant species meeting the definition of rare or endangered under CEQA Guidelines Section 15380 including, but not limited to, the federally endangered and state threatened La Graciosa thistle (*Cirsium scariosum var. loncholepis*) and the federally endangered and State Rare Pismo clarkia (*Clarkia speciosa ssp. immaculata*). The NOP states that these species may be impacted, but does not list any mitigation measures to reduce impacts to a level that is less than significant. CDFW recommends that the EIR includes an impact analysis on all species with the potential to occur in the Project area including, but not limited to, these species listed above.

Specific impact: Without appropriate avoidance and minimization measures for special-status plants, potential significant impacts resulting from ground- and vegetation-

disturbing activities associated with Project construction include inability to reproduce and direct mortality.

Evidence impact would be significant: Special-status plant species known to occur in the vicinity of the Project site are threatened by residential development, road maintenance, vehicles, grazing, trampling, and invasive, non-native plants (CNPS 2021), all of which may be unintended impacts of the Project. Therefore, impacts of the Project have the potential to significantly impact populations of the species mentioned above.

Recommended Potentially Feasible Mitigation Measure(s)
To evaluate potential impacts to special-status plant species associated with the Project, CDFW recommends conducting the following evaluation of the Project area, editing the IS/MND to include the following additional measures, and including the following mitigation measures as conditions of approval.

Recommended Mitigation Measure 17: Special-Status Plant Surveys

If suitable habitat is present, CDFW recommends that the Project site be surveyed for special-status plants by a qualified botanist following the "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities" (CDFW 2018). This protocol, which is intended to maximize detectability, includes the identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. In the absence of protocol-level surveys being performed, additional surveys may be necessary.

Recommended Mitigation Measure 18: Special-Status Plant Avoidance

CDFW recommends that special-status plant species be avoided whenever possible by delineating and observing a no-disturbance buffer of at least 50 feet from the outer edge of the plant population(s) or specific habitat type(s) required by special-status plant species. If buffers cannot be maintained, then consultation with CDFW is warranted to determine appropriate minimization and mitigation measures for impacts to special-status plant species.

Recommended Mitigation Measure 19: State-Listed Plant Take Authorization

If a plant species listed pursuant to CESA or State designated as rare is identified during botanical surveys, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, take authorization prior to any ground-disturbing activities may be warranted. Take authorization would occur through issuance of an ITP by CDFW, pursuant to Fish and Game Code section 2081 subdivision (b) for State listed threatened or endangered plants or pursuant to the Native Plant Protection Act and Fish and Game Code section 1900 et seq. for State designated rare plants.

II. Editorial Comments and/or Suggestions

Nesting birds: CDFW encourages that Project implementation occur during the bird non-nesting season; however, if ground-disturbing or vegetation-disturbing activities must occur during the breeding season (February through mid-September), the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Code sections referenced above.

To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified wildlife biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground or vegetation disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project site to identify nests and determine their status. A sufficient area means any area potentially affected by the Project. In addition to direct impacts (i.e. nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once construction begins, CDFW recommends having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. CDFW recommends that a qualified wildlife biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

Federally Listed Species: CDFW recommends consulting with the USFWS on potential impacts to federally listed species including, but not limited to, monarch butterfly and CRLF. Take under FESA is more broadly defined than CESA; take under FESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS in order to comply with FESA is advised well in advance of any ground-disturbing activities.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a data base which may be used to make subsequent or

supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNDDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP to assist County of San Luis Obispo Planning and Building Department in identifying and mitigating Project impacts on biological resources.

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (https://www.wildlife.ca.gov/Conservation/Survey-Protocols). Please see the enclosed Mitigation Monitoring and Reporting Program (MMRP) table which corresponds with recommended mitigation measures in this comment letter. Questions regarding this letter or further coordination should be directed to Aimee Braddock, Environmental Scientist at (559) 977-3352 or aimee.braddock@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Bob Stafford
5343A684FF02469...

Julie A. Vance
Regional Manager

Attachments
A. MMMRP for CDFW Recommended Mitigation Measures

cc: Office of Planning and Research, State Clearinghouse, Sacrament

REFERENCES

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Attachment 1

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

PROJECT: Dana Reserve Specific Plan

SCH No.: 2021060558

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
Before Disturbing Soil or Vegetation	
Mitigation Measure 1: Monarch Butterfly Habitat Assessment	
Mitigation Measure 2: Monarch Butterfly Surveys	
Mitigation Measure 4: American Badger Surveys	
Mitigation Measure 6: CRLF Surveys	
Mitigation Measure 8: BUOW Surveys	
Mitigation Measure 10: BUOW Passive Relocation and Mitigation	
Mitigation Measure 11: Western Spadefoot Surveys	
Mitigation Measure 13: Special-Status Species Habitat Assessment	
Mitigation Measure 14: Species-Specific Species Surveys	
Mitigation Measure 16: Special-Status Species Take Authorization	
Mitigation Measure 17: Special-Status Plant Surveys	
Mitigation Measure 19: State-Listed Plant Take Authorization	
During Construction	
Mitigation Measure 3: Monarch Butterfly Take Avoidance	
Mitigation Measure 5: American Badger Avoidance	
Mitigation Measure 7: CRLF Avoidance	
Mitigation Measure 9: BUOW Avoidance	

Mitigation Measure 12: Western Spadefoot Avoidance	
Mitigation Measure 15: Special-Status Species Take Avoidance	
Mitigation Measure 18: Special-Status Plant Avoidance	

DEPARTMENT OF TRANSPORTATION
CALTRANS DISTRICT 5
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3329
TTY 711
www.dot.ca.gov/dist05/

Making Conservation a California Way of Life.

July 23, 2021

SLO US101 PM 6.24
SCH# 2021060558

Jennifer Guetschow, Project Manager
County of San Luis Obispo
Planning and Building Department
976 Osos Street, Rm 200
San Luis Obispo, CA 93401

COMMENTS FOR THE NOTICE OF PREPARATION (NOP) OF AN ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE DANA RESERVE SPECIFIC PLAN

Dear Ms. Guetschow:

The California Department of Transportation (Caltrans) appreciates the opportunity to review the NOP for the Dana Reserve Specific Plan. We look forward to reviewing the EIR with the completed traffic report and vehicle miles traveled (VMT) analysis. Of particular interest to us is the impacts and proposed mitigations at the US101/ Willow Road intersection. At this time, we offer the following comments in response to the NOP:

Caltrans supports development that is consistent with State planning priorities intended to promote equity, strengthen the economy, protect the environment, and promote public health and safety. We accomplish this by working with local and state jurisdictions to achieve a shared vision of how the transportation system should and can accommodate interregional and local travel and development. Projects that support smart growth principles which include improvements to pedestrian, bicycle, and transit infrastructure (or other key Transportation Demand Strategies) are supported by Caltrans and are consistent with our mission, vision, and goals.

As a result of Senate Bill (SB) 743, effective July 2020 Caltrans replaced vehicle level of service (LOS) with vehicle miles traveled (VMT) as the primary metric for identifying transportation impacts from local development. The focus now will be on how projects are expected to influence the overall amount of automobile use instead of traffic congestion as a significant impact. For more information, please visit: http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

Employing VMT as the metric of transportation impact Statewide will help to promote Green House Gas (GHG) emission reductions consistent with SB 375 and can be achieved

through influencing on-the-ground development. Implementation of this change will rely, in part, on local land use decisions to reduce GHG emissions associated with the transportation sector, both at the project level, and in long-term plans (including general plans, climate action plans, specific plans, and transportation plans) and supporting Sustainable Community Strategies (SCS) developed under SB 375.

Climate change impacts on the State Highway System (SHS) and local roadways should be addressed given the forecasted regional increase in wildfires, precipitation, and temperature. The SHS is the backbone of most county-level evacuation plans and often provides the only high-capacity evacuation routes from rural communities. Further, the SHS serves as the main access routes for emergency responders, and may serve as a physical line of defense such as a firebreak or an embankment against floodwaters, etc.

Please be aware that if any future work is completed in the State's right-of-way it will require an encroachment permit from Caltrans and must be done to our engineering and environmental standards, and at no cost to the State. The conditions of approval and the requirements for the encroachment permit are issued at the sole discretion of the Permits Office, and nothing in this letter shall be implied as limiting those future conditioned and requirements. For more information regarding the encroachment permit process, please visit our Encroachment Permit Website at: https://dot.ca.gov/caltrans-near-me/district-5/district-5-programs/d5-encroachment-permits.

Caltrans requests to be included in any future public noticing regarding this project to allow us to prepare for and participate in the public process.

We look forward to continued coordination with the County on this effort. If you have any questions, or need further clarification on items discussed above, please contact me at (805) 835-6432 or Jenna.Schudson@dot.ca.gov.

Sincerely,

Jenna Schudson
Development Review Coordinator
Caltrans District 5, LD-IGR South Branch

Craig A. Steele

T 805.439.3515
F 800.552.0078
E csteele@rwglaw.com

847 Monterey Street, Suite 207
San Luis Obispo, California 93401
rwglaw.com

July 23, 2021

VIA ELECTRONIC MAIL jguetschow@co.slo.ca.us

Jennifer Guetschow
Senior Planner
County of San Luis Obispo
976 Osos Street, Room 200
San Luis Obispo, California 93408

Re: Notice of Preparation - Draft Environmental Impact Report for the Dana Reserve Specific Plan

Dear Ms. Guetschow:

This firm represents the Nipomo Community Services District ("NCSD"), for which I serve as General Counsel. NCSD will be a responsible agency for this project, if approved by San Luis Obispo County ("County"). I write on behalf of NCSD to provide comments on the scope and content of the environmental information which will be germane to NCSD's statutory responsibility to consider the annexation of the proposed project area for water, sewer and solid waste services, and to comment on the Initial Study ("IS") the County has prepared and circulated. NCSD requests that these comments be addressed in the Environmental Impact Report ("EIR") for the proposed project, and that this letter be made a part of the record of the County's consideration of the proposed project.

NCSD agrees with the Lead Agency's decision to prepare an EIR for the County's consideration of the Dana Reserve Specific Plan ("DRSP"). NCSD will serve as a responsible agency, as defined in Public Resources Code Section 21069, because the DRSP applicant has filed an application for annexation into NCSD for water and sewer services, and solid waste disposal services provided by NCSD's franchisee. NCSD expects that County staff will consult with NCSD staff as necessary throughout the County's preparation of the EIR on issues within NCSD's jurisdiction, as required by 14 Cal. Code of Regs. Sections 15072(b) and (f), and NCSD staff will respond to such requests for consultation.

As a responsible agency, and based on the information currently available to us, NCSD expects that the DRSP, if approved by the County, will require NCSD's consideration of the following proposed elements:

1. Annexation application pursuant to NCSD's Annexation Policy
2. Annexation Agreement(s)
3. Will Serve and Intent to Serve Letters
4. Plan Check and Inspection Agreement ("PCIA")
5. Infrastructure improvement plans and specifications

Our comments on the IS are as follows:

1. As a part of the stated goals of the project, NCSD requests that an additional goal be added: "Meet or exceed the requirements of the NCSD District Code to ensure that the DRSP constructs the water and wastewater infrastructure necessary to serve the project without adverse impacts on NCSD's ability to serve existing and future users."

2. The IS inconsistently uses such terms as "public utility connections" and "utility infrastructure" to describe the on-site and off-site improvements the DRSP developer would be required to construct in order for NCSD to provide water and wastewater services to the DRSP site. "Connections" are different than "infrastructure" and both would be required. During the EIR process, NCSD staff will be available to the County to define the significant water and wastewater infrastructure that the developer would be required to construct in order to have services for the DRSP project. In short, there will be no "connections" unless the "utility infrastructure" is constructed. NCSD requests that this issue be clarified in the EIR project description specifically, and throughout the document, so that readers and decision-makers can be assured that the EIR fully examines the impacts of the infrastructure-related impacts of the project. For example, given the extent of the excavation and construction that may be necessary to extend water and wastewater mains to service the DRSP area, those construction activities may create temporary impacts in the areas of traffic, noise and air quality that must be adequately evaluated in the EIR.

3. Examples of the comment above can be found on pages 5 and 6 of the IS, where the text describing Phase 1 and Phase 2 work should accurately and consistently identify that the developer will be required to provide off-site and on-site utility infrastructure early in the phasing of the project to ensure that water and wastewater services will be available when needed.

4. On page 8 of 44, under "utilities" we note that it is premature to say that the project "will" be served by the NCSD for water and wastewater services. The DRSP applicant has proposed that NCSD annex the property for services, and the application is subject to discretionary review by the NCSD Board and San Luis Obispo County LAFCO if the County first approves the DRSP. In that regard, NCSD's provision of services to the property is different than the regulated public utility providers listed after NCSD.

5. On page 29 of 44, in the second paragraph under "[d]iscussion" the description of the NCSD's major water supply sources is not correct. Please consult with NCSD staff to better define the sources of the water NCSD supplies to its customers. Further, NCSD has not yet

finally determined that it "could supply the community with its existing water supply" and that statement should not be made in the EIR. As noted in the next sentence, NCSD is in the process of preparing capacity studies to make those determinations about the water and wastewater demand created by the DRSP. Over time, NCSD's ability to serve the DRSP and other properties in its service area will depend on NCSD's ability to take its full allocation of water under the referenced Santa Maria Groundwater Basin adjudication. That may depend on NCSD's ability to import water from the City of Santa Maria through the Nipomo Supplemental Water project, free from the unnecessary physical limitations on that water delivery that have been maintained by Santa Barbara County in violation of the above-referenced adjudication.

6. On page 41 of 44, in the discussion of utilities, it is unclear why the IS refers to the County's provision of water and wastewater services to County Service Areas in a discussion of a site that is currently undeveloped and, to our knowledge, does not currently take water or wastewater services.

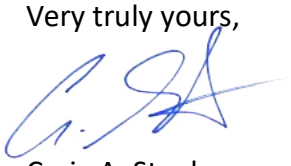
7. NCSD understands that the projections of future water and wastewater demand from the DRSP, based on estimates provided by the developer, are projections for the purposes of the IS only. NCSD expects that its own analysis of future DRSP water and wastewater demand will be the bases for analysis of impacts in the EIR.

8. It should be noted that South County Sanitary Services currently is the NCSD franchisee to provide solid waste disposal services to properties within the District, and would provide services if NCSD approves the annexation. In addition, at the bottom of page 41 of 44, the IS indicates that Cold Canyon Landfill has an expected close date of 2040. Where would DRSP solid waste be disposed of after the closure date?

On behalf of NCSD, thank you for the opportunity to comment on the IS. NCSD looks forward to contributing to a legally adequate and informative EIR. If you have any questions regarding these comments, please contact me. Further, please add me to the list to receive notices and further information regarding the DRSP, including those items listed in Public Resources Code Section 21167(f).

To consult with NCSD staff throughout the preparation of the EIR, please contact General Manager Mario Iglesias at miglesias@ncsd.ca.gov.

Very truly yours,



Craig A. Steele

cc: Mario E. Iglesias, General Manager

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SLO COUNTY apcd | Air Pollution Control District San Luis Obispo County

VIA EMAIL ONLY

July 26, 2021

Jennifer Guetschow
County of San Luis Obispo Planning and Building
976 Osos Street, Room 200
San Luis Obispo, CA 93408
jguetschow@co.slo.ca.us

SUBJECT: APCD Comments Regarding the Initial Study/Notice of Preparation for the Draft Environmental Impact Report of the Dana Reserve Specific Plan

Dear Jennifer Guetschow:

Thank you for including the San Luis Obispo County Air Pollution Control District (APCD) in the environmental review process. We have completed our review of the Initial Study (IS)/Notice of Preparation (NOP) for the Draft Environmental Impact Report (DEIR) for the Dana Reserve Specific Plan (DRSP). On July 21, 2020, APCD submitted a comment letter on the Tract Map and Conditional Use Permit for this project. While today's letter will reiterate many of our previous comments, our comments today represent the latest and most complete recommendations that APCD has to offer on the project.

The project is a request by Dana Reserve, LLC for the adoption of a Specific Plan, Vesting Master Tentative Tract Map No. 3149, Conditional Use Permit, and Development Agreement to allow for the phased development of a master planned community. The project would allow for the future phased development of residential uses, flex commercial uses, open space, trails, and a public neighborhood park within an approximately 288-acre specific plan area. Future proposed development of individual neighborhoods would require the submittal of additional future tract maps to further subdivide the neighborhoods into individual lots; this EIR is intended to provide CEQA streamlining and tiering benefits for those future developments.

Proposed uses for the project are: 833 single family residences (149.5 acres); 458 multi-family residences (23.5 acres); up to 203,000 sq. ft. of commercial and office space (22.3 acres); open space, parks, and roads (92.7 acres).

On January 26, 2021, the Board of Supervisors authorized a General Plan Amendment (LRP2020-00007) to allow for the processing of the DRSP; to ensure consistency between the DRSP, the County General Plan, and Land Use Ordinance, Title 22 of the County Code; and to change the land use category of the site to allow for the DRSP.

The DRSP area is within the unincorporated area of San Luis Obispo County, adjacent to the Urban Reserve Line (URL) of the community of Nipomo and within the sphere of influence of the Nipomo Community Services District (NCSD). The project would require annexation to the NCSD to establish new connections to existing NCSD water and wastewater infrastructure and modification of the Nipomo URL to include the DRSP area. Annexation of the specific plan area into NCSD service area would be subject to the review and approval of the San Luis Obispo Local Agency Formation Commission.

The County of San Luis Obispo General Plan identifies the project site as the Cañada Ranch specific plan area, which is subject to preparation and adoption of a specific plan prior to annexation of the site into the Nipomo URL to accommodate development proposals and address pertinent issues. The property is designated as an expansion area under the South County Area Plan (Sections 4.5 and 4.8) as well as the San Luis Obispo County Code (Inland) – Title 22, Land Use Ordinance (Section 22.98.072).

Implementation of the DRSP would provide a guide for future private and public development in conformance with requirements set forth in the California Government Code Sections 65450 through 65457. The DRSP would provide a bridge between the County's General Plan and specific development and subdivision plans of the property.

The following comments are formatted into 3 sections. The **(1) General Comments** section states information pertinent to the applicant, lead agency, and/or public. The **(2) Air Quality** and **(3) Greenhouse Gas Emissions** sections may state mitigation measures and/or rules and requirements which the APCD recommends be set as conditions of approval for the project.

The **applicant** or **agent** should contact the APCD Engineering & Compliance Division about permitting requirements stated in the **(1) General Comments** section. The **lead agency** may contact the APCD Planning Division for questions and comments related to proposed conditions of approval in the **(2) Air Quality** and **(3) Greenhouse Gas Emission** sections. Both Divisions can be reached at 805-781-5912.

Please Note: The APCD recently updated the Land Use and CEQA Webpage on the slocleanair.org website. The information on the webpage displays the most up-to-date guidance from the SLO County APCD, including the 2021 Interim CEQA Greenhouse Gas Guidance, Quick Guide for Construction Mitigation Measures and Quick Guide for Operational Mitigation Measures.

(1) General Comments

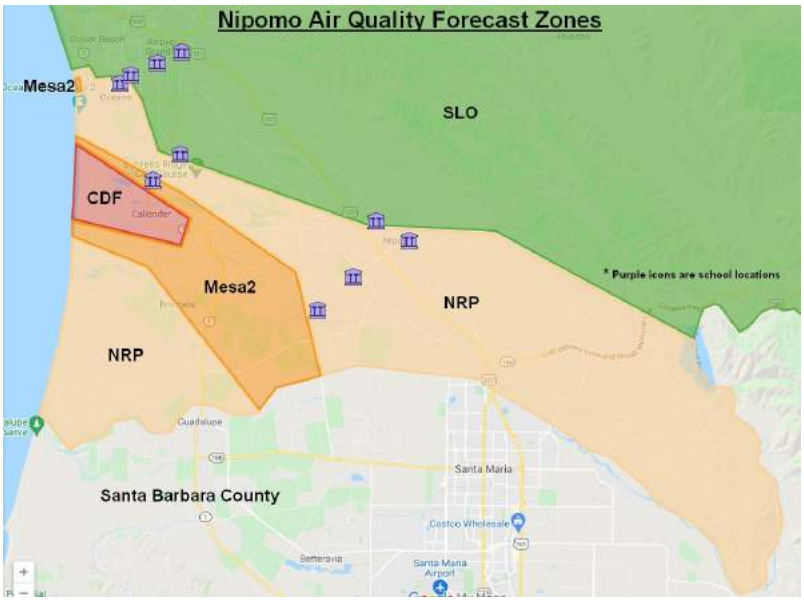
South County Particulate Matter Air Quality Impacts

Environmental Setting

The proposed project is in an area that is impacted by periods of high particulate matter concentrations during blowing dust events. To keep the public informed of periods of deteriorating air quality, the APCD provides a daily air quality forecast for SLO County, which is partitioned into nine air quality forecast zones. Air quality forecast for a six-day period is provided for each zone. In

the Nipomo Mesa area, there are four forecast zones as shown in the map below. The zones are named for the monitoring stations that are located within each zone; CDF, MESA 2, NRP and SLO:

The darker colors signify the typical location of the dust plume and the greater impacts during a typical blowing dust event. The public can experience adverse health impacts in areas with blowing dust. This proposed project is in the NRP zone.



Zone Name	Annual Exceedances (days)
CDF	45 - 95
Mesa 2	30 - 60
NRP	0 -20
SLO	0 - 3

The blowing dust events are typically most frequent in the spring, however, dust events can occur at any time of the year. As shown in the map above, the greatest impacts occur when the strong winds blow from the northwest which direct the dust plume inland over the Nipomo Mesa where it can impact residents. Residents can plan to avoid peak dust impacts by being aware of typical dust plume characteristics. A typical event tends to start around noon and end by the early evening, with peak impacts between 1 pm to 5 pm. The strongest events can result in blowing dust from 9 am to 7 pm, with peak impacts between noon and 6 pm. Outdoor activities and exercise should be planned in late evenings and mornings due to lower particulate matter concentrations.

Children and individuals with compromised cardiac and respiratory systems or related health problems are called sensitive receptors. Sensitive receptors can experience greater health impacts than the general population during blowing dust events. Sensitive receptor locations include schools, residential dwellings, parks, day care centers, nursing homes, and hospitals. Individuals can receive daily air quality forecasted conditions via email by registering on the EPA's EnviroFlash website http://www.enviroflash.info and entering ZIP code 93444.

Efforts to reduce particulate matter on the Nipomo Mesa are underway through Stipulated Abatement Order 17-01 entered between the APCD and California Department of Parks and Recreation Off-Highway Motor Vehicle Recreation Division. The Order was approved by the APCD Hearing Board on April 30, 2018. This stipulated abatement order calls for specific actions to ensure significant reductions in particulate matter are achieved on the Nipomo Mesa over a five-year period.

Support of Mixed-Use Development

APCD staff would like to commend the proponents for this project on their promotion of mixed-use development. When people can walk or bike to nearby businesses or parks, traffic is reduced, and we create healthy communities. This is consistent with several of the APCD's land use goals and policies in the Clean Air Plan and helps meet the SB 32 and SB 375 emission reduction targets set by California legislation and the California Air Resources Board (CARB). To help improve the project and region's jobs-housing balance APCD recommends the project commercial components be conditioned to provide preferential incentives for Commercial Allowable Uses that support head of household jobs. This would support jobs-housing balance goals, policies, and strategies in Section 4.5 of the South County Area Plan, the 2019 San Luis Obispo Council of Governments' (SLOCOG) Regional Transportation Plan and Sustainable Communities Strategy, and the APCD's Clean Air Plan.

Developmental Burning

APCD Rule 501 prohibits developmental burning of vegetative material within San Luis Obispo County.

Construction Permit Requirements

Based on the information provided, we are unsure of the types of equipment that may be present during the project's construction phase. Portable equipment, 50 horsepower (hp) or greater, used during construction activities may require a California statewide portable equipment registration (issued by CARB) or an APCD permit. The following list is provided as a guide to equipment and operations that may have permitting requirements but should not be viewed as exclusive:

- Portable generators and equipment with engines that are 50 hp or greater;
- Electrical generation plants or the use of standby generators;
- Internal combustion engines;
- Tub grinders; and
- Portable plants (e.g. aggregate plant, asphalt batch plant, concrete batch plant, etc).

For a more detailed listing, refer to the Technical Appendices, page 4-4, in the *CEQA Air Quality Handbook* (April 2012).

Operational Permit Requirements

Based on the information provided, we are unsure of the types of equipment that may be present at the site. Operational sources may require APCD permits. The following list is provided as a guide to equipment and operations that may have permitting requirements but should not be viewed as exclusive:

- Portable generators and equipment with engines that are 50 hp or greater;
- Chemical product processing and or manufacturing;
- Electrical generation plants or the use of standby generators;
- Food and beverage preparation (primarily coffee roasters);

- Furniture and fixture products;
- Metal industries, fabrication;
- Small scale manufacturing;
- Auto and vehicle repair and painting facilities;
- Dry cleaning;
- Boilers;
- Internal combustion engines; and
- Sterilization units(s) using ethylene oxide and incinerator(s).

For a more detailed listing, refer to the Technical Appendix, page 4-4, in the APCD's *CEQA Air Quality Handbook* (April 2012). Most facilities applying for an Authority to Construct or Permit to Operate with stationary diesel engines greater than 50 hp, should be prioritized or screened for facility wide health risk impacts. A diesel engine-only facility limited to 20 non-emergency operating hours per year or has demonstrated to have overall diesel particulate emissions less than or equal to 2 lb/yr does not need to do an additional health risk assessment.

Health Risk from Nearby Diesel Trucks
The development plans for the DRSP show that sensitive receptors (housing units, day care centers, residential care homes, etc.) could be developed in close proximity to Highway 101 where mobile sources producing diesel particulate matter can present health risks to sensitive receptors. Diesel particulate matter has been classified by CARB as a toxic air contaminant and a carcinogen. Because of this, the APCD does not support sensitive receptor development near Highway 101. Non-sensitive uses and developments such as commercial, parking lots and offices – in which occupants are exposed to the health risk for a shorter duration – are better suited to be nearest to Highway 101. Health risks decrease with decreased rate of exposure to the toxic source.

Should the development continue, the APCD recommends the following:

- Orient the sensitive receptors as far back as possible from the toxic source, which will directly reduce cancer risk;
- Incorporate strategies stated in Table 1 from the CARB's technical advisory document Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways; *(Note: Implementing strategies such as air filtration systems, sound walls, and vegetation barriers have not been proven to be as effective as moving a sensitive receptor farther from the toxic source.)*
- Disclose potential health risks from US Highway 101 to the future sensitive receptors for informational purposes.

Low-income community members often face existing health disparities, so siting affordable housing near pollution sources should be reconsidered (See Page 57 of the CARB's 2017 Scoping Plan update). To be in alignment with State goals, specifically Assembly Bill 617 (which aims to reduce exposure of toxic air contaminants in low-income and disadvantaged communities and protect public health), housing that is or could become affordable should be sited in a fair, environmentally just way. On their Environmental Justice website, the U.S. EPA defines fair treatment as, "No group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies". It is important to consider that current land use decisions could create a neighborhood that may bear more of the environmental impacts that come from pollution sources in the future.

When siting new housing near potential sources of pollution, APCD recommends incorporation of layout and design considerations to reduce exposure to sensitive receptors. For example, policies can identify minimum setbacks and orientation strategies to situate sensitive receptors as far as possible from the toxic source to reduce health risks. Further, ensuring affordable housing is located near or developed with transit services and active transportation infrastructure offers the opportunity to minimize trip and commute distances and provide alternative transportation options to employment, schools, and services which can help reduce emissions and improve our region's air quality.

(2) Air Quality

CONSTRUCTION PHASE

Construction Phase Impacts - Insufficient Information

The project referral includes grading quantities for the proposed project of 670,000 cubic yards of cut and 585,000 cubic yards of fill as well as a general understanding of the proposed residential and commercial development. However, sufficient information regarding the construction phase emissions for this project was not provided to quantify the air quality impacts. An air quality impact assessment of the construction phase needs to be completed that quantifies the impacts, and incorporates mitigation if impacts are above the APCD's significance threshold values identified in Table 2-1 of the *CEQA Air Quality Handbook* (April 2012). The APCD recommends the use of the current CalEEMod to accomplish the air quality assessment.

At a minimum, the construction phase air quality assessment needs to document the following information/assumptions that were used in the modeling:

- Area of disturbance;
- An estimation of the number and type of construction equipment operating throughout the construction phase of the project;
- Identify sensitive receptors within 1,000 feet of the construction boundary (see Section 2.1.1 in the CEQA Air Quality Handbook);
- If project includes cut and fill, hauling (on-site or off-site), identify fleet mix, hauling route (must minimize sensitive receptor impact) and number of trips per day;
- Time frame for the operation of construction equipment during the project, which includes:
  - Estimated construction schedule for all phases including anticipated phase overlaps;
  - An estimation of the number of daily operating hours for the equipment;
  - An estimation of equipment that would operate simultaneously on a given day;
- Total square footage of the property;
- Square footage and other relevant metrics for the buildings of each proposed land use type (e.g., number of units, hotel/motel rooms etc.);
- Square footage of each building footprints if this area differs from the total square footage (i.e. multi-story buildings);
- Square footage and type of parking facilities;
- Square footage of open space/landscaped area; and
- Square footage of roads/driveways.

Based on the preliminary information contained in the referral, the APCD recommends the following mitigation measure be set as a condition of approval for the project. More

mitigation measures such as APCD's Standard and Best Available Control Technology, and a Construction Activity Management Plan may be necessary for the project upon completion of a construction air quality assessment.

South County Particulate Matter Standard Air Quality Mitigation Measures

Construction activities can generate fugitive dust, which could be a nuisance to residents and businesses in close proximity to the proposed construction site. Projects with grading areas more than 4 acres and/or within 1,000 feet of any sensitive receptor shall implement the following mitigation measures to manage fugitive dust emissions such that they do not exceed the APCD 20% opacity limit (APCD Rule 401) and minimize nuisance (APCD Rule 402) impacts:

a. Reduce the amount of the disturbed area where possible;
b. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site and from exceeding the APCD's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible. When water use is a concern due to drought conditions, the contractor or builder shall consider use of a dust suppressant that is effective for the specific site conditions to reduce the amount of water used for dust control. As stated previously, please refer to the following link for potential dust suppressants to mitigate dust emissions: Products Available for Controlling Dust;
c. All dirt stockpile areas should be sprayed daily and covered with tarps or other dust barriers as needed;
d. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible, and building pads should be laid as soon as possible after grading unless seeding, soil binders or other dust controls are used;
e. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) or otherwise comply with California Vehicle Code (CVC) Section 23114;
f. "Track-Out" is defined as sand or soil that adheres to and/or agglomerates on the exterior surfaces of motor vehicles and/or equipment (including tires) that may then fall onto any highway or street as described in CVC Section 23113 and California Water Code 13304. To prevent 'track out', designate access points and require all employees, subcontractors, and others to use them. Install and operate a 'track-out prevention device' where vehicles enter and exit unpaved roads onto paved streets. The 'track-out prevention device' can be any device or combination of devices that are effective at preventing track out, located at the point of intersection of an unpaved area and a paved road. Rumble strips or steel plate devices need periodic cleaning to be effective. If paved roadways accumulate tracked out soils, the track-out prevention device may need to be modified;
g. All fugitive dust mitigation measures shall be shown on grading and building plans;
h. The contractor or builder shall designate a person or persons whose responsibility is to ensure any fugitive dust emissions do not result in a nuisance and to enhance the implementation of the mitigation measures as necessary to minimize dust complaints and reduce visible emissions below the APCD's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Their duties shall include holidays and weekend periods when work may not be in progress (for example, wind-blown dust could be generated on an open dirt lot). The name and telephone number of such persons shall be provided to the APCD

Compliance Division prior to the start of any grading, earthwork or demolition (Contact the Compliance Division at 805-781-5912);

i. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible, following completion of any soil disturbing activities;
j. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established;
k. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;
l. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;
m. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers shall be used with reclaimed water where feasible. Roads shall be pre-wetted prior to sweeping when feasible; and
n. Take additional measures as needed to ensure dust from the project site is not impacting areas outside the project boundary.

Based on the preliminary information contained in the referral, the APCD recommends the following special condition be set as a condition of approval for the project. More special conditions may be necessary upon completion of a construction air quality assessment.

Limits of Idling During Construction Phase
State law prohibits idling diesel engines for more than 5 minutes. All projects with diesel-powered construction activity shall comply with Section 2485 of Title 13 of the California Code of Regulations and the 5-minute idling restriction identified in Section 2449(d)(2) of the CARB In-Use Off-Road Diesel regulation to minimize toxic air pollution impacts from idling diesel engines. The specific requirements and exceptions for the on-road and off-road regulations can be reviewed at the following web sites: arb.ca.gov/sites/default/files/classic/msprog/truck-idling and arb.ca.gov/regact/2007/ordiesl07/frooal.pdf.

In addition, because this project is within 1,000 feet of sensitive receptors (residences), the project applicant shall comply with the following more restrictive requirements to minimize impacts to nearby sensitive receptors:

1. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
2. Diesel idling within 1,000 feet of sensitive receptors shall not be permitted;
3. Use of alternative fueled equipment is recommended; and
4. Signs that specify no idling areas must be posted and enforced at the site.

OPERATIONAL PHASE

Operational Phase Impacts – Insufficient Information
Sufficient information regarding the operational phase emissions for this project was not provided to quantify the air quality impacts. An air quality impact assessment of the operational phase needs to be completed that quantifies the impacts and incorporates mitigation if impacts are above the APCD's thresholds in Table 3-2 of the CEQA Air Quality Handbook. The APCD recommends the use of the current CalEEMod (caleemod.com) to accomplish the air quality assessment.

At a minimum, the operational phase air quality assessment needs to document the following information/assumptions that were used in the modeling:

- Total square footage of the property;
- Square footage and other relevant metrics for the buildings of each proposed land use type (e.g., number of units, hotel/motel rooms, etc.);
- Square footage of each building footprint if this area differs from the total square footage (i.e., multi-story buildings);
- Square footage and type of parking facilities;
- Square footage of open space/landscaped area;
- Square footage of roads/driveways;
- If trip rates other than CalEEMod default rates are used, traffic study or other justifiable traffic information must be documented;
- Trip mileage differences from CalEEMod default mileage values if these defaults do not represent the project's anticipated trip distances (e.g. motels/hotels);
- If project includes hauling, identify fleet mix, hauling route (must minimize sensitive receptor impact) and number of trips per day;
- Identify sensitive receptors within 1000 feet of property boundary (see Section 2.1.1 in the CEQA Air Quality Handbook); and
- Identify operational activity that will release toxic air contaminant (e.g., diesel back-up generator, loading dock, gasoline station).

Operational Phase Traffic and Air Quality

The traffic study for the DRSP identifies that with the project, all freeway segments operate unacceptably during at least one peak hour in all scenarios evaluated. The APCD supports the development of mitigation measures in coordination with Caltrans to minimize congestion related air quality impacts from the project.

The proposal identifies measures to reduce traffic related air quality impacts including two transit hubs in coordination with the San Luis Obispo Regional Transit Authority and a park and ride lot that should be coordinated with SLOCOG. The proposal also identifies that the project could install highspeed fiber to allow the community to connect into future extensions of high-speed fiber infrastructure to the property. Realizing this connectivity for the project would support better opportunities for work and school from home. The APCD supports the full implementation of these measures which would reduce vehicle miles traveled and related air quality impacts.

(3) Greenhouse Gases (GHG)

SLO County APCD's 2021 CEQA Greenhouse Gas (GHG) Guidance

Beyond criteria pollutant impacts, the project should also evaluate the construction and project life operational phase impacts of the DRSP project. **The bright-line and service population GHG thresholds in the SLO County APCD Handbook are AB 32 based and project horizons are now beyond 2020. The SLO County APCD does not recommend the use of these thresholds in CEQA evaluations.** The APCD developed the 2021 Interim CEQA Greenhouse Gas Guidance document (CEQA GHG Document) to provide administrative clarification on the SLO County APCD Handbook's thresholds of significance for GHG emissions and to provide information on current trends, best practices, and legislation.

The APCD recommends calculating the greenhouse gas emissions for this project and using the threshold (or other interim thresholds adopted by the lead agency) and mitigation recommendations in the CEQA GHG Document.

Additionally, the guidance in CEQA GHG Document should be used to compare the project to existing applicable plans, policies or regulations that have been adopted for the purpose of reducing GHG emissions.

Again, thank you for the opportunity to comment on this proposal. If you have any questions or comments, feel free to contact me at (805) 781-5912.

Sincerely,

VINCE KIRKHUFF
Air Quality Specialist

VJK/jjr

cc: Dora Drexler, APCD
Emily Creel, SWCA Environmental Consultants
Nick Tompkins, Applicant

CREED LA

July 14, 2021

Via Email and U.S. Mail

County of San Luis Obispo
Attn: Jennifer Guetschow
976 Osos St.
San Luis Obispo, CA 93401
jguetschow@co.slow.ca.us

RE: Public Records Act Request and Request for Mailed Notice of Public Hearings and Actions – Dana Reserve Specific Plan, Sandydale Dr and Briarwood Ln. Nipomo, CA 93444

Dear Ms. Guetschow,

CREED LA is writing to request a copy of any and all records related to the project, the Dana Reserve Specific Plan, located at Sandydale Drive and Briarwood Lane in Nipomo. The project will be the adoption of a specific plan for the construction of 833 single-family units, 458 apartment units, 180,000 square feet of flex commercial space, and 23,000 square feet of village commercial space. We are also writing to request copies of all communications and mailed notice of any and all hearings and/or actions related to the Project.

Our request for mailed notice of all hearings includes hearings, study sessions and community meetings related to the Project, certification of the MND (or recirculated DEIR), and approval of any Project entitlements. This request is made pursuant to Public Resources Code Sections 21092.2, 21080.4, 21083.9, 21092, 21108 and 21152 and Government Code Section 65092, which require local agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body. Our request includes notice to any City actions, hearings or other proceedings regarding the Project, Project approvals and any actions taken, or additional documents released pursuant to the California Environmental Quality Act.

Our request for all records related to the Project is made pursuant to the California Public Records Act. (Government Code § 6250 et seq.) This request is also made pursuant to Article I, section 3(b) of the California Constitution, which provides a constitutional right of access to information concerning the conduct of government. Article I, section 3(b) provides that any statutory right to information shall be broadly construed to provide the greatest access to government information and further requires that any statute that limits the right of access to information shall be narrowly construed.

We will pay for any direct costs of duplication associated with filling this request up to $200. However, please contact me at (877) 810-7473 with a cost estimate before copying/scanning the materials.

Pursuant to Government Code Section 6253.9, if the requested documents are in electronic format and are 10 MB or less (or can be easily broken into sections of 10 MB or less), please email them to me as attachments.

My contact information is:

U.S. Mail

Jeff Modrzejewski
CREED LA
501 Shatto Place, Suite 200
Los Angeles, CA. 90020

Email
creedla@creedla.com

Please call me if you have any questions. Thank you for your assistance with this matter.

Sincerely,

Jeff Modrzejewski
Executive Director

California Wildlife Foundation/California Oaks, 201 University Avenue, Berth H-43 Berkeley, CA 94710, (510) 763-0282

July 15, 2021

Jennifer Guetschow
Department of Planning and Building
976 Osos Street, Room 300
San Luis Obispo, CA 93408

RE: Dana Reserve Specific Plan Initial Study, ED21-094 (PLN-1118)

Transmitted via email: jguetschow@co.slo.ca.us

Dear Ms. Guetschow:

The California Oaks program of California Wildlife Foundation (CWF/CO) works to conserve oak ecosystems because of their critical role in sequestering carbon, maintaining healthy watersheds, providing wildlife habitat, and sustaining cultural values. CWF/CO reviewed the Preliminary Initial Study for Dana Ridge Specific Plan (DRSP). The planned removal of greater than one third of the site's oak woodlands runs counter to the expressed goals for protecting biological resources in the Conservation and Open Space Element of the San Luis Obispo County General Plan; the watershed management, erosion control, soil conservation, greenhouse gas reduction, biodiversity and ecological stability goals of the county's Oak Woodland Ordinance; the South County Area Plan's call to evaluate the parcel for preservation because of its habitat values; and Countywide Design Guidelines that call for conservation of areas with high ecological sensitivity.

Oak impacts

The Conservation and Open Space Element of the San Luis Obispo General Plan identifies diminishing oak woodlands due to tree cutting, urban conversion, and displacement by non-native species as a "Major Issue" with respect to Biological Resources. Further, the plan calls for increased protection of oak woodlands.[1]

Section 4.5 of the South County Area Plan addresses the site's oak woodland: "The property has a large oak woodland that should be evaluated for preservation as a long-term habitat."

Section 22.58.060 of San Luis Obispo County's oak ordinance states:

> Cumulative removal cannot exceed 5% of site's total canopy, or result in the conversion of the Oak Woodland for an allowed use as identified in table 2-2, without an approved land use permit pursuant to section 22.58.050.

Section 22.58.050 B states:

> Clear-cutting of more than three acres of Oak Woodland. Conditional Use Permit approval is required to clear-cut more than three (3) acres of a Site's Oak Woodland over a ten year period. Clear cutting shall be cumulative where the

[1] See 18, 70, and 71.

clear-cutting may not exceed the permitted amount during one event or multiple events occurring over a ten-year period.

Discussion: San Luis Obispo County's General Plan and Oak Woodland Ordinance all clearly state the value the County places on its native oak heritage. The South County Area Plan specifically addresses the oak woodlands at the site for the proposed development. The Initial Study plan to remove greater than one third of the parcel's oaks and to mitigate for the oak removal at a site of unknown habitat value is inconsistent with oak protections articulated by the county. Further detail is provided below.

Special status plant impacts

The unique habitat values of the Dana Reserve site are an argument for continued uses that support the sensitive ecological communities that it supports. General Plan Biological Resources Policy 3.1 Native Plant Protection states: "Protect native and biologically valuable trees, oak woodlands, trees with historical significance, and forest habitats to the maximum extent feasible."[2]

Biological Resources Policy 3.2, Protection of Native Trees in New Development, states: "Require proposed discretionary development and land divisions to avoid damage to native trees (e.g., Monterey Pines, oaks) through setbacks, clustering, or other appropriate measures. When avoidance is not feasible, require mitigation measures."[3]

Biological Resources Policy 3.3, Oak Woodland Preservation, states: "Maintain and improve oak woodland habitat to provide for slope stabilization, soil protection, species diversity, and wildlife habitat." Includes specific implementation strategies. High Priority.[4]

San Luis Countywide Design Guidelines specify that development should conserve special areas identified as having high ecological sensitivity, listing oak woodlands as examples of natural resources to preserve: Development should be designed to preserve and protect existing native trees on site if feasible."[5]

Four of the eight sensitive plant species found on the property during the botanical surveys reported in the Initial Study are associated with oaks, including the federally endangered Pismo clarkia (*Clarkia speciosa ssp. immaculata*). California Natural Diversity Database (CNDDB) occurrence data show an average of 28.72 % occurrences of sand mesa manzanita with oaks, 41.6% of Nipomo Mesa ceanothus occurrences, 44.5% of Pismo clarkia occurrences, and 18.7% of mesa hokelia occurrences.[6]

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[2] See 89.

[3] See 90.

[4] See 90 and 105.

[5] See 1 and 99.

[6] These data were generated by California Department of Fish and Wildlife (CDFW), first with a cross-reference of CNDDB occurrence records with the oak woodland dataset in CDFW's Areas of Conservation Emphasis system. This search generated a list of all special-status species that had at least part of an occurrence overlapping with oak ecosystems. CDFW then calculated the percentage of the CNDDB occurrence polygon(s) that overlapped with oak woodlands.

Mitigation

Page 8 of the Initial Study discusses planned removal of the estimated 99 acres of oak woodland as well as oaks in chaparral, yet page 19 appears to suggest the impacts could be greater:

> The DRSP proposes to preserve existing oak woodlands to the extent feasible; however, future development of the DRSP area would result in impacts to oak woodlands present on-site and may result in a conflict with local policies or ordinances.

It is not possible to fully assess the adequacy of the plan to conserve 200 acres of oak woodland and 120-acres of chaparral containing oaks at Dana Ridge without knowing the full impact of the proposed project on the site's oaks. The April 2021 DRSP states: "Off-site mitigation for loss of oak woodland habitat will be provided by oak woodland habitat acquisition and conservation at a 2:1 ratio (two acres conserved for every acre of oak woodland habitat impacted)." The 2:1 figure should be qualified if the quoted text above from page 19 is suggesting that oak removals may exceed the estimates. Additionally, the Initial Study provides very little information on the habitat values of Dana Ridge and thus it is not possible to assess the parcel's suitability for mitigation.

This letter is being sent in advance of the July 19 scoping meeting to convey CWF/CO concerns about the environmental impacts of the proposed oak removals. San Luis Obispo County's Voluntary Oak Management Plan states: "Fragmented habitats provide fewer values for the plant and animal species that remain, increasing competition for resources, and isolating populations, which can lead to a decrease in both plant and animal diversity."[7] The habitat values of the Dana Ridge site will be degraded by the proposed development. An alternate site may be a more appropriate location for the development.

Sincerely,

Janet Cobb
Executive Officer
California Wildlife Foundation

Angela Moskow
Manager
California Oaks Coalition

cc: Kelly Reed Daulton, Templeton Heritage Tree Foundation, templetonoaks@gmail.com
Brian Trautwein, Environmental Defense Center, btrautwein@environmentaldefensecenter.org
Tiffany Yap, DEnv, PhD, Center for Biological Diversity, tyap@biologicaldiversity.org

[7] See 10.

[EXT]Dana Reserve Project

Nipomo Recreation <nipomorecreation@gmail.com>

Mon 7/19/2021 11:11 AM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Hello

I am the CEO/Executive Director of Nipomo Recreation. We have been in Nipomo for over 32 years as the strongest organization for families and the community. I feel that this project is a strong part of Nipomo as a whole. Nipomo is growing and this project is part of that growth. I support this project in its entirety.

--

Jeff Long
Nipomo Recreation Association
CEO/Executive Director
nipomorecreation@gmail.com
c: 805-215-9295

[EXT]FW: Support for Dana Reserve

Kenneth Trigueiro <kennetht@pshhc.org>

Mon 7/19/2021 1:31 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>
Cc: Kenneth Trigueiro <kennetht@pshhc.org>

County of San Luis Obispo
Planning Department
EIR and Scoping Process Comments

RE: Support for Dana Reserve Project

Dear Airlin Singewald, Planning Manager
Jennifer Guetschow, Project Manager
Et al,

People's Self-Help Housing is the longest-serving nonprofit affordable housing organization on the Central Coast, founded in San Luis Obispo County in 1970. With a mission of building homes and providing services to strengthen communities and change lives, People's serves low-income households, working families, seniors, veterans, farmworkers, those living with disabilities and the formerly homeless. We provide rental and homeownership opportunities, with over 3000 homes successfully completed, in San Luis Obispo, Santa Barbara, Ventura and Monterey counties, and employing over 200 staff members locally.

We are supportive of processing the Dana Reserve Specific Plan (SP) and General Plan Amendment (GPA) to develop the 288-acre "Cañada Ranch" property in Nipomo. It is our understanding that this well-planned project will provide critically needed housing, affordable to various levels of income earning households, including wage earners and middle income salary earners, both groups of which are sorely undersupplied of affordable options within the County. We believe the housing proposed will be designed to meet a substantial level of the target population. There are limited opportunities to address the County's unincorporated areas needs for housing, in such a comprehensive manner. The proposed housing will serve various income levels, helping achieve the County's economic strategy by housing workers and their families, who represent the workforce across all six of the County's priority business clusters. The project can go a long way toward meeting Regional Housing Needs Assessment targets and meeting the Housing Element goals of the County's General Plan, and is a unique opportunity in that regard.

The community-based Developer's proposed concept meets the most critical needs for the community, for the most challenging categories of households, and provides the opportunity to go beyond the basic requirements for the project to contribute toward affordable housing. We are very pleased to see the collaborative Developer's goal is to make available this valuable resource to address affordable housing needs through a land donation. We have experienced how such donations can leverage substantial more investment into the community and create more units than required, and at much more affordable terms to the future residents. We have studied the proposal and believe it is a well thought out concept and very feasible. Additionally, we support the project's provision of substantial mitigation measures, including approximately 14,000 trees permanently conserved along with 1,500 replanted.

www.pshhc.org
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Kenneth Trigueiro
CEO & President

linkedin.com/company/pshhc
instagram.com/pshhc
www.neighborworks.org

3533 Empleo St
San Luis Obispo, CA 93401
Office (805) 540-2453

[EXT]Dana Reserve Scoping Call

Melissa James <melissa@reachcentralcoast.org>

Mon 7/19/2021 1:31 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>
Cc: Julie Sinton Pruniski <julie@reachcentralcoast.org>

Hello Jennifer,

My name is Melissa James and I represent REACH, a regional economic action coalition serving San Luis Obispo and Santa Barbara Counties. I understand that you will be considering a project today that would add a substantial amount of housing at a time and location that would benefit theCentral Coast workforce.

The State of California, including San Luis Obispo County is experiencing a serious housing shortage and the need for immediate relief has been prioritized both at the local and state level. The pressure of high housing costs and low wages are felt broadly across the region according to a public opinion poll conducted by REACH prior to the COVID-19 pandemic. This poll told us only 1/529 of our region's workforce believe housing is affordable, and 86% of our workforce don't believe our young people today will have the opportunity to live on the Central Coast when they enter the workforce.

Simply put, the need for housing cannot be overstated which is why investing in, planning for, and ultimately creating more housing options across the Central Coast is an economic imperative for our region and a key pillar of our REACH 2030 economic strategy. Second only to the global pandemic of COVID-19, the lack of housing affordable to our workforce is widely considered one of the biggest drags on our economy, hindering the region's ability to attract and retain a talented workforce.

With that in mind, we ask that you advance the consideration of the Dana Reserve project as this project would:

- Make a measurable and meaningful impact on the housing shortage for the low- and middle-income residents across the County who desperately need housing
- Implement the County's stated land use goals
- Provide affordable housing to meet the County's affordable housing/RHNA goals
- Provide the County with increased tax revenues.
- The project would provide a portion of the Real Property to be developed as a business park, commercial area, or such related uses
- Finally, the project also includes a conservation easement, community park, and trail system for community recreation, and community benefits such as childcare and a college satellite campus

Thank you for your leadership and thoughtful consideration.

Best,
Melissa

Melissa James
President & CEO | REACH
P: (805) 476.0412 **E:** melissa@reachcentralcoast.org
reachcentralcoast.org/datacenter
Sign up to receive REACH news

Coastal San Luis Resource Conservation District
1203 Main Street, Suite B, Morro Bay, CA 93442
805-772-4391 | www.coastalrcd.org

July 21, 2021

Ms. Jennifer Guetschow
Department of Planning and Building
County of San Luis Obispo
976 Osos Street, Room 300
San Luis Obispo, CA. 93408

RE: Dana Reserve Specific Plan and Environmental Impact Report
Transmitted via email: jguetschow@co.slo.ca.us

Dear Ms. Guetschow:

The Coastal San Luis Resource Conservation District (CSLRCD) has followed the proposal for urban development of the 288 acre Dana Reserve project with considerable interest. We request that the following issues be fully evaluated in the project's Environmental Impact Report (EIR).

1. ***Biological impacts.*** The project proposes to develop between 1,200 and 1,300 dwelling units, and certain commercial development covering approximately 75% (210 acres) of the site. A conditional use permit is being requested as part of the project to allow the removal of over 3,400 mature oak trees and associated vegetation and wildlife habitat. Proposed mitigation appears to be offered in the form of dedication of an off-site property some miles away. Is this truly mitigation? We are not convinced of the propriety of such a proposal as mitigation, since conservation of that site does not establish any new oak trees, woodland habitat, or other habitat to replace that which is proposed to be removed. Therefore we request a detailed study and discussion of this proposal, its legal and social acceptability, and how it provides appropriate mitigation for identified impacts upon native woodland and shrub habitat, and upon rare or endangered plant and animal species.

2. ***Water Availability.*** There is considerable uncertainty about the availability of water in the Nipomo Mesa area. Local measurements have shown a decline in the groundwater table on the Mesa over the past ten years, and imported water may or may not be able to stem or reverse this decline, if such water will in fact be available in the future. Indeed, the RCD was asked to conduct certain inquiries into a similar matter, when a rural development proposal for the Laetitia Winery and Vineyard was brought forward some years ago, and it was ultimately determined that the groundwater supply in the area was not sufficient to support the proposed development. While the Laetitia site is some miles away from Dana Reserve, it illustrates some of the challenges that water development in the Nipomo area must face. For this and other reasons, we request a detailed and independent analysis of the current status of the Nipomo Mesa area's water supply, past issues, historical trends, future prospects (especially in the event of continued drought), and how the proposed project will affect those matters.

Thank you for the opportunity to comment on this project EIR.

Sincerely,

p.p. Jackie Crabb, District Manager

Neil Havlik, PhD.
President, Board of Directors
Coastal San Luis Resource Conservation District

CALIFORNIA
NATIVE PLANT SOCIETY

July 23, 2021

Jennifer Guetschow
County of San Luis Obispo Planning and Building Department
976 Osos Street, Room 300
San Luis Obispo, CA 93408

RE: Dana Reserve Tract Map with Conditional Use Permit (SUB 2020-00047) and General Plan Amendment (LRP2020-00007) Scoping Documents

Transmitted via email: jguetschow@co.slo.ca.us

Dear Ms. Guetschow,

The San Luis Obispo Chapter of the California Native Plant Society focuses on the protection of and education about native plant species and their natural habitats in San Luis Obispo County and portions of northern Santa Barbara County. We have reviewed the Notice of Preparation and Initial Study for the Dana Reserve development, proposed for the site known as Canada Ranch in Nipomo. This development contemplates a total of 1,270 new residential units on a 280-acre site outside the Urban Reserve Line in the Nipomo Mesa area. A General Plan Amendment would be required to expand the Urban Reserve Line. Land uses would be changed from Residential Rural to Residential Single Family, Recreation, Residential Multi-Family and Commercial. The developer proposes to dedicate 388 acres offsite as permanent open space to mitigate for impacts. We understand that a Specific Plan is required to adjust the Urban Reserve Line to include the site, and that annexation to the Nipomo CSD is being proposed. A Conditional Use Permit is required under the County Oak Ordinance to remove the oaks as proposed.

CNPS has also reviewed selected portions of the application materials for this project, made available on the County's website, including the Initial Study, Biological Constraints Analysis Report prepared by Althouse and Meade (dated August 2018), and the updated Biological Report dated May, 2021 (hereafter 2021 Report). Thank you for making these reports available to us.

On June 17, 2021, our conservation team was given the opportunity to visit the site. We spent approximately 2 hours on site. We are thankful for the opportunity to visit the site. We have also examined historical aerial photographs and reviewed other information for the project. Based on our review of the project materials and knowledge of the site and the region, we offer the following comments and suggestions. Note that any photographs of the site that we have attached were taken from public roads offsite.

1. **Reduced Project Must be Evaluated**

CNPS would like to register its strong opposition to this project as currently proposed, and **we repeat our request of April 2, 2021 (letter to Board of Supervisors) that a much-reduced alternative to the project be brought forth for co-equal evaluation with the proposed project.** CNPS recognizes that San Luis Obispo County has a housing shortage. However, the

community of Nipomo should not be expected to bear the brunt of what is a County-wide problem. Therefore, we suggest consideration of a reduced alternative project, for the following primary reasons:

a) The project threatens thousands (3,430 to be removed according to the 2021 Report) of mature coast live oak trees on a unique dune habitat with destruction, making a mockery of the County's Native Tree Protection Ordinance. The EIR should evaluate the loss and the manner in which any loss is mitigated. As this is some of the last remaining contiguous oak woodlands on the Mesa, the cumulative impact of its destruction should be addressed.
b) The project puts forth a false mitigation of street tree plantings and off-site conservation of a wooded property (referred to as Dana Ridge), located in an entirely different watershed and ecosystem some several miles away. The EIR should evaluate mitigation in comparison with the imposed mitigation for the adjacent Willow Road project and the intent of the Oak Tree Ordinance, evaluate the proponents proposed mitigation against commonly applied mitigation standards, and evaluate the ecological equivalence of street trees vs. natural habitat. The problems of using coast live oak as a street tree, particularly in regard to natural limb spreading and constant leaf fall should be evaluated in terms of practicality, and also in terms of long-term management goals over the centuries-long life of an oak. As it is possible to redesign this project to minimize loss of oaks though project redesign such as clustering and increased density in a reduced area, such possible reconfigurations should be discussed in the EIR.
c) The project would significantly impact hundreds of acres of recovering Burton Mesa Maritime Chaparral on site, including several rare and/or special status plants. This natural community is one of the rarest in San Luis Obispo County and is rapidly decreasing on the Nipomo Mesa. The EIR should evaluate losses to this habitat and discuss mitigation.
d) The project contrasts significantly from surrounding rural residential development. Changing the General Plan to accommodate a massive upzoning should be evaluated in regard to neighborhood concerns.
e) The project is inconsistent with several County policies, including the current land use designation of Residential Rural; the South County Area Plan recommendation that the oak woodlands on site be *evaluated for preservation*, and the County Land Use Ordinance which includes *as a first priority* in type of uses: “open space uses within the oak woodlands.” The EIR should discuss all inconsistencies of this project with the current General Plan.
f) The project will severely strain the water resources of the Nipomo community (including imported water and groundwater), which in turn demands a full accounting of water need for the entire Nipomo community, not just the Dana Reserve project. The project should analyze both the input provided by the project proponent, input from Nipomo CSD, and the implications of a falling Key Well Index in the light of expected changes in annual rainfall. Input from other significant water users should also be included in the analysis.
g) The cumulative impacts on water demand from this and other foreseeable projects on the wetlands of Black Lake Canyon and Black Lake would be significant and must be

evaluated, particularly because those resources have already been severely impacted by lowered water tables. This should be addressed in the EIR.

San Luis Obispo County does not need to trade its unique, irreplaceable and valuable natural resources for the development of housing. The above issues and recommendations for the EIR are discussed further below.

2. Environmental Setting

"Knowledge of the regional setting is critical to the assessment of environmental impacts. Special emphasis should be placed in the EIR on environmental resources that are rare or unique to that region and would be affected by the project." CEQA Guidelines 15125 (c). The proposed project is located on the Nipomo Mesa, part of the dune sheet of the Callendar complex (Cooper, 1967). These dunes contain "Nipomo Mesa" maritime chaparral that has affinities to the rare and sensitive natural community called Burton Mesa chaparral in Santa Barbara County (Davis, Hickson, and Odion 1988), and the Fort Ord sand hills in Monterey County (Griffin, 1978). This is one of the last remaining areas of its type on Nipomo Mesa and in San Luis Obispo County. Due to its unique sand dune nature, there are floral displays that occur adjacent to Highway 101, and the site has provided springtime displays for commuters for years. The County's Land Use Standards reflect this, as specialized botanical and/or biological studies are required in areas of the Mesa (e.g., Porter Pacific, Green Canyon, and Summit Station areas to name a few) and make specific mention of maritime chaparral. See Section 22.98.070 H (3)f, 22.98.070 H (11)a, and 22.98.070 H (9)e Of the County Land Use Ordinance.

Furthermore, the 4-mile long Black Lake Canyon, located on the Mesa within 2 miles of this project, plays an important part in the greater Nipomo-Guadalupe Dunes Ecosystem due to its hydrologic influence and as an important habitat migration corridor. These resources are unique to this area and must be addressed adequately in the EIR.

3. Impact Analysis

a. Visual Concerns

The project site is visible from Highway 101, Thompson Road, and Dana Foothill Road. Views of the project site from these vantage points should be addressed in the EIR. The impacts of losing one of the last remaining pieces of open space between Santa Maria and Pismo Beach should be evaluated in the EIR.

b. Biological Resources

Loss of Oak Trees. This project proposes to remove over 3,000 mature oak trees on the site, covering approximately 100 acres (2021 Report). This is undoubtedly one of the most significant such clearing efforts in recent County history; certainly the largest that is seeking County sanction. We do not know the age or size ranges of the oaks on site, but a cursory inspection shows considerable variation in both. We understand that some cutting was done years ago for livestock feed and for firewood or charcoal, and the trees then re-grew with multiple trunks. This

seems to be the case for many but by no means all of the oaks on site. A site history would be helpful in understanding the character and richness of this important area of Nipomo Mesa. We note the Specific Plan (page 3-3) indicates that the site continues to be managed for grazing. **Please provide the site history with regard to grazing in the EIR (numbers and types) and indicate the most recent grazing activity on site. "In recent decades" is not specific enough.**

The project sponsor also announced in a public presentation that, while the project would "impact oaks," it was planned to plant some 1,500 coast live oaks as street trees. This seemed to imply that such planting was suitable as mitigation. CNPS rejects this implication, as it is more than just trees that would be destroyed; it would be an entire, functioning habitat. Please refer to Exhibit A to see the potential contrast between existing site trees and proposed mitigation trees planted for a recent development project in San Luis Obispo.

As discussed above, **the project EIR should develop a reasonable mitigation proposal along the model of the mitigation for the Willow Road** extension project of some years ago, with at least the same ratio of mitigation to tree removal (and in similar soils), at a site that can then be dedicated to permanent conservation.

Loss Of Maritime Chaparral. Appropriate detail should be provided in the EIR to explain how the boundaries of the vegetation types were decided upon, and how the particular vegetation types and Alliances (e.g., Coast Live Oak Woodland and chamise-black sage chaparral alliances) were chosen, given the presence of characteristic species such as sand mesa manzanita, mesa horkelia, rush rose (*Crocanthemum, =Helianthemum scoparium*), and sand almond (see page 44, 51, 52 of 2021 Bio Report) on the site. The updated 2021 Biological Report identifies coast live oak woodlands (117 acres) and chamise-black sage chaparral (36 acres) alliances as the primary natural communities on site (Table 3, 2021 Report). These communities have Global and State rarity ranks of G5/S4 and G4/S4, respectively. CNPS disagrees with this assessment and therefore requests that the EIR evaluate losses to all impacted vegetation types. It is worth noting that oaks are a common component of the maritime chaparral/coastal scrub mosaic, especially the multi-stemmed oaks seen on this site (Davis Hickson and Odion, 1988).

CNPS requests that the following additional issues concerning Maritime Chaparral be addressed in the EIR. Components of Maritime Chaparral habitat are currently present over a large portion of the site. We believe that the ***Arctostaphylos (purissima, rudis)*** Shrubland Special Stands (CDFW, 2020), also known as Burton Mesa Chaparral, or a form thereof, are present on site. This is one of the rarest natural communities known in San Luis Obispo County and has a Global rarity ranking of G1 indicating there are less than 6 viable occurrences worldwide and a State rarity ranking of S1, indicating there are less than 6 viable occurrences statewide. These stands are characterized by the presence of sand mesa manzanita (*Arctostaphylos rudis*) in the shrub canopy, along with several other species (Sawyer Keeler-Wolf and Evens, 2009). Page 18 of the initial constraints analysis (and pg. 44 of the 2021 Report) indicates that sand mesa manzanita "is known to occur on sandy soils in maritime chaparral and coastal scrub habitats…" Page 20 of the report (pg. 52 in 2021 Report) also indicates that sand almond occurs in maritime chaparral and coastal dune scrub. Table 1 below presents 2021 observations from 3 locations on the Dana Reserve site relative to the characteristic species of this alliance, in addition to those seen last year in the maritime chaparral at Nipomo Regional Park. Maritime chaparral is further defined

and characterized by Vasey et al., (2014), and sand mesa manzanita, among other species noted on the site, is included in the maritime climate zone. A Price Canyon variant of Maritime Chaparral is described in the Price Canyon Planning Area EIR (LFR, 2008, now ARCADIS, in the Price Canyon General Plan Update).

Table 1. Characteristic Species of Maritime Chaparral Noted in 3 areas of the Project Site. (Special Status species in **Bold**.)

Alliance Defining Species (per Sawyer Keeler-Wolf and Evens 2009)	**Dana, Site 5 (6-17-21)**	**Dana, Site 6 (6-17-21)**	**Dana, Site 7 (6-17-21)**	**Nipomo Park (7-28-20)**
GPS (degrees)	Lat 35.049634 Long -120.501634	Lat 35.045667 Long -120.507005	Lat 35.043953 Long -120.501764	
Deerweed *Acmispon glaber (Lotus scoparius)*	x	x	x	x
Sand mesa manzanita *Arctostaphylos rudis*	**x**	**x**	**x**	**x**
Chamise *Adenostoma fasciculatum*	x	x	x	x
California sagebrush *Artemisia californica*	x	x	x	x
Coyotebrush *Baccharis pilularis*		x		x
Lompoc Ceanothus *Ceanothus cuneatus var. fascicularis*	**x**			
Nipomo Mesa Ceanothus *Ceanothus impressus var. nipomensis*	**x**			
Bush monkeyflower *Diplacus aurantiacus*	x	x	x	x
Mock heather *Ericameria ericoides*		x		x
Rush-rose *Helianthemum (Crocanthemum) scoparium*	x	x	x	x
Black sage *Salvia mellifera*		x		x

These data show that the site, at these specific areas and beyond, based on our observations and analysis, contains the characteristic species of what can be called Burton Mesa Chaparral, or the ***Arctostaphylos (purissima, rudis)* Shrubland Special Stands.** We also call your attention to a 1994 aerial photograph from GoogleEarth (Exhibit B, Figure 1, attached) wherein the majority of the site can be seen to contain a dense shrub cover intermixed with the oaks on site. The aerial

signature of this site can be seen to be the same as that of Nipomo Regional Park, which also contains maritime chaparral (Exhibit B, Figure 2). **We request that the EIR thoroughly address the history of the site and assess the present vegetation in light of the current and historical presence of the species listed above on the project site.** CEQA (Section 15125) requires an adequate description of baseline environmental conditions present on the site at the time the NOP is published. The above species are present on site now (See 2021 Report, Table 6) and are characteristic species of the Special Stands identified above, per Sawyer, Keeler-Wolf and Evens (2009). **This must be addressed in the EIR.**

The Nipomo Native Garden, located in the immediate area of the site, refers to Central Maritime Chaparral on its website and also refers to many of the same species found on this site. As noted by its name, this "Nipomo Mesa" maritime chaparral has affinities to the rare and sensitive natural community called Burton Mesa chaparral in Santa Barbara County (Davis, Hickson, and Odion 1988), and the Fort Ord sand hills in Monterey County (Griffin, 1978). It appears to fit best into "Coastal Sand-plains and Stabilized Dunes" recognized by Hoover (1970), which he says is "most extensively developed on Nipomo Mesa."

The County's website (CSS portal, Assessor's Parcel 091-301-073) indicates at least two code enforcement cases based on reports of brush-clearing on the site, one as recently as 2017. The effects of past vegetation management and type conversion of habitat, and the observed natural regeneration of habitat at the site should be examined in terms of evaluating the ecological future of the parcel under different development scenarios.

Impacts identified in the 2021 biological report include the loss of 99 acres of oak woodland and 35 acres of chamise-black sage chaparral, with 18 acres of oak woodland preserved on site. Again, CNPS believes this is an inaccurate characterization of the site vegetation and that an unknown amount of maritime chaparral would be lost as a result of the project.

The EIR consultant needs to contact CDFW VegCamp staff and identify accepted methods (e.g., CNPS Rapid Assessment protocol) to clarify the existence (or lack thereof) of sensitive natural communities onsite, specifically maritime chaparral. In addition, we believe this project needs to be completely revamped given the rare plants, rare natural communities, and oak woodlands constraints that are present on the site.

Loss of Habitat for eight Special Status plant species. The April 2021 Specific Plan on page 3-4 indicates that "on-site habitat on DRSP occupied by sensitive species will be placed in protected easements. Appropriate off-site habitat will be preserved and/or restored to mitigate for impacts to rare plant species." **This off-site habitat for mitigation of rare plant species needs to be identified in the EIR**. It is not likely that the proposed Tematatte Ridge off-site mitigation area will be an ecologically appropriate location for these plant species with habitat preference for sandy soils of the dune ecosystem.

Biological Mitigation Proposal. The applicant proposes to dedicate roughly 388 acres outside the property on which the project would be constructed as permanent open space to mitigate (compensate) for impacts to biological impacts (oak woodlands and chamise-black sage chaparral). The site is located in the upper reaches of Los Berros Canyon, and is only accessible

via unpaved roads. Ninety-nine percent of the site (shown on Figure 1 of Appendix F of the 2021 Report and Exhibit 3-2 of the April 2021 Specific Plan) is not even visible from Nipomo[1]. The California Native Plant Society does not recognize offsite compensation as mitigation; rather, the Society fully endorses only avoiding the impact (See Appendix A to CNPS Policy on Mitigation Guidelines, 1998). Note that this CNPS Policy does not appear to be characterized correctly in the 2021 Biological Report on pg. 19. First, the 2021 Report references CNPS 2001, and there is no CNPS Mitigation Policy dated 2001. (The link in the references goes to the 1998 Policy.) Secondly, it ignores the Appendix to the Policy which states the above position of endorsing avoidance. Our concerns regarding the proposed off-site mitigation are as follows:

- The mitigation site does not contain the maritime chaparral community that is being impacted by the project; thus it is not "like for like;"
- The mitigation site does not contain the one characteristic species, *Arctostaphylos rudis*, and several other characteristic and/or special status species, that make up the on-site maritime chaparral habitat;
- The mitigation site is in an entirely different watershed from the proposed project site;
- The resources present on the mitigation site are not threatened (the land is zoned Agriculture);
- The mitigation does not compensate for the loss of over 3,000 mature coast live oak trees, nor for the loss of maritime chaparral.

We reiterate that a reduced alternative that avoids the significant impacts to oaks and adjacent habitat must be addressed in the EIR.

c. Land Use and Planning (Policy Inconsistency)

The Initial Study indicates that the EIR will contain a detailed analysis of project consistency with applicable land use plans. We offer the following to be addressed:

The *Conservation and Open Space Element* identifies 'Major Issues" for Biological Resources on pg. 3.5:

"1) Integrated management approach. Increasing risk of degradation and/or elimination of natural resources requires coordinated and integrated management of the county's biological resources by public, private, nonprofit, and agricultural organizations at ecosystem and site-specific levels.

2) Land use conversion. Changing land uses, particularly conversion of agricultural and rural lands to residential and urban uses, adversely impact species and their habitats.

3) Wildlife protection. Changing land uses impact wildlife movement corridors and displaces wildlife.

[1] Note that the map of the Mitigation site presented at the July 19 scoping meeting and in the Initial Study (Figure 1) is different from that shown in these documents. This needs to be clarified. It appears that Fig. 1 in the Initial Study is incorrect.

4) Oak woodlands. Areas of oak woodlands and native trees are diminishing due to tree cutting, urban land conversion and displacement by exotic/non native species."

The proposed project clearly produces a further aggravation of these issues, and this should be addressed in the EIR. The environmental review must examine impacts under these 'Major Issues.'

Section 4.5 of the *South County Area Plan* (Rural Area Land Use, pg. V.4-17) states the following with regard to the Canada Ranch:

"…The property has a large oak woodland that should be evaluated for preservation as a long-term habitat…A specific plan should be accompanied by market feasibility and fiscal impact studies and an environmental impact report **to determine the logical extent and location of development**."

This implies the EIR is intended to help determine the extent and location of development, and points to the importance of a careful and detailed alternatives analysis in the EIR.

Section 22.58.010 of the *County Land Use Ordinance* identifies the purpose and intent of the County's Oak Woodland Ordinance as follows:

"The intent of this ordinance is to maintain the character of the existing landscape and promote oak woodland management independent of regulation."

Note this says "maintain the character of the existing landscape…" It was not intended to allow for wholesale destruction of oak woodlands just by virtue of requiring a Conditional Use Permit.

Section 22.98.070 South County Sub-Area Standards, Subsection D, regarding Open Space preservation, has a cluster subdivision incentive. We note that the County's "info-hold" letter dated July 24, 2020 indicated that "the map is not compliant with 86% of existing oaks to be removed." The letter goes on to suggest that a cluster design that would reduce these impacts should be considered. **We agree and suggest this be included in the Alternatives analysis of the EIR.**

Section 22.98.072.H (8) of the *County Land Use Ordinance* (Canada Ranch) includes as *a first priority* in type of uses: "open space uses within the oak woodlands." This section of the LUO also calls for:

"Oak Habitat Preservation. Designation of the existing oak forest habitat for open space preservation, where limited recreational and open space uses may be allowed."

As noted above, the project proposed to remove 3,430 oak trees and retain 516 (14% of the existing trees). According to the 2021 Report, 99 acres of coast live oak woodland habitat would be removed. This is wholly inconsistent with this policy. Preserving an isolated 388-acre parcel that is inaccessible to the public as mitigation for the loss of oak woodland and chaparral does not meet the intent of this policy.

In light of the above policy inconsistencies, the EIR must consider alternatives that avoid the inconsistencies and avoid and reduce the significance of these impacts.

d. Utilities and Service Systems (Water Resources)

The project site lies within the Nipomo Mesa Management Area (NMMA) of the Santa Maria Groundwater Basin, which has been subject to litigation for years. The availability of water resources will require critical analysis in the EIR, particularly in the expectation of continued drought conditions due to climate change and made evident in current literature.

According to the IS, the total estimated water demand at full buildout is estimated at 336.25 AFY, with a 10% contingency estimated at 369.88 AFY. While the developer argues that it can use as-yet-unallocated water from the Nipomo CSD water imports under the Stipulation and Judgment for the Santa Maria Groundwater Litigation (*Santa Maria Valley Water Conservation District vs. City of Santa Maria, et al*. Superior Court for the County of Santa Clara Case No. 770214), there is no evidence yet presented on the impacts of the water supply and future development on the entire Santa Maria Groundwater Basin. The Stipulation referred to above requires the determination of water shortage condition in the NMMA using the Key Wells Index as criteria as part of the Annual Report. According to the 2020 Annual Report, the Key Wells Index indicated severe water shortage conditions. The import of water through the NCSD pipeline was in part to offset overdraft within that basin, and as the Stipulation does not apply to, or limit, the pumping of overlying property owners such as agriculturalists on the Mesa, the cumulative impacts must be analyzed in the EIR.

Regarding anticipated water supply deficiencies, the County Resource Summary Report of 2016-2018 recommends a Level of Severity III for the Nipomo Mesa portion of the groundwater basin (San Luis Obispo County, 2018).

Black Lake Canyon is a significant ecological resource on the Nipomo Mesa. It provides wetland habitat for two plants listed as Endangered under the Federal ESA, in addition to a number of other wetland-dependent species. These plants are narrow endemics and require water-saturated dune sands as habitat. A study in 1994 (Chipping 1994) showed that the water table in the Black Lake Canyon area is variable, but the wetlands in the lower canyon are drying up. Further degradation of the lower canyon wetlands has the potential to threaten the habitat of each of these plants. The relation of the lower canyon waters to those of the regional aquifer must be addressed and the cumulative impacts on the hydrology and wetlands of Black Lake Canyon and Black Lake should be evaluated in the EIR.

In light of the above situation, **the environmental analysis should include discussion and analysis of the NMMA Key Wells Index and the observations and conclusions of the Nipomo Mesa Management Area 13th Annual Report, Calendar Year 2020 (NMMA Technical Group, 2021)**.

4. Alternatives

An EIR must describe a reasonable range of alternatives to the project, or to the location of the project, that could feasibly attain **most of** the basic objectives of the project while avoiding or substantially lessening any of the significant effects of the project, CEQA Guidelines Section 15126.6(a), (f). The proposed project would potentially affect 99 acres of sensitive oak woodland and maritime chaparral habitat, in addition to several special status plant and animal species. The EIR must identify an alternative that avoids these impacts.

CNPS SLO requests that a much-reduced alternative be evaluated that preserves the majority of the oak trees and maritime chaparral on site and that this alternative be evaluated co-equally with the proposed project. At a minimum, the EIR should evaluate the following alternatives:

- No project alternative;
- Allowable buildout under the General Plan;
- A clustered development alternative;
- A reduced density alternative;
- Alternative locations for the neighborhoods that reduce their size and impacts to sensitive resources, specifically oak woodlands and maritime chaparral.

Alternative project designs should be evaluated in consideration of the 'Major Issues' for Biological Resources as listed in the County's Open Space and Conservation Element, as discussed above.

We appreciate the County's careful consideration of our concerns in this process. Please include our organization on the list of interested parties for any future notices related to the project. Again, CNPS recognizes that the County has a housing shortage. We do not believe, however, that the County's unique and irreplaceable natural resources need to be sacrificed in order to make progress toward the goal of additional housing. Otherwise, what is the point of living here vs. living in downtown Los Angeles?

Sincerely,

Melissa Mooney
President
San Luis Obispo Chapter, California Native Plant Society
mjmoon@charter.net
cnpsslo.org

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Exhibit A

Photo taken looking southeast from intersection of Hetrick Avenue and Glenhaven Place, east of Calimex Pl. These mature oak trees would be removed for proposed Neighborhood 8.

Photo of a small coast live oak street tree at a recent development in San Luis Obispo.

Exhibit B

Figure 1. 1994 Aerial photo showing Dana Reserve and dense shrubland on site.

Figure 2. 1994 Aerial photo showing Nipomo Regional Park with similar shrubland aerial signature.

July 26, 2021

Sent via email and U.S. Mail

Jennifer Guetschow
County of San Luis Obispo
976 Osos St., Room 200
San Luis Obispo, California, 93401
JGuetschow@co.slo.ca.us

Re: Comments on Notice of Preparation for Dana Reserve Specific Plan (ED21-094 (PLN-1118)

Dear Jennifer,

These comments are submitted on behalf of the Center for Biological Diversity (the "Center") regarding County of San Luis Obispo's ("County") Notice of Preparation ("NOP") of a Environmental Impact Report ("EIR") for the Dana Reserve Specific Plan (the "Project"). The Center is concerned about the significant impacts the Project may impose. The Center urges the County to fully evaluate, disclose, and plan to mitigate the environmental impacts of this Project as required by the California Environmental Quality Act ("CEQA"). The Project would result in loss of native oak woodlands, amplified wildfire risk, and increased greenhouse gas emissions. The Project must include substantial mitigation efforts to preserve habitat and biodiversity, address wildfire risks, and reduce and offset greenhouse gas emissions.

The Center for Biological Diversity ("Center") is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and the United States. The Center and its members have worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in California.

I. *The Project would significantly impact oak woodlands and associated biodiversity. The EIR must thoroughly analyze such impacts and plan adequate mitigation measures.*

The California Environmental Quality Act ("CEQA") requires an Environmental Impact Report ("EIR") to provide decision-making bodies and the public with detailed information about the effect a proposed project is likely to have on the environment, to list ways in which the significant effects of a project might be minimized, and to indicate alternatives to the project. (Pub. Res. Code § 21061.) In particular, CEQA requires a lead agency to mitigate to the extent feasible significant impacts, including a significant cumulative climate change impact. (CEQA Guidelines § 15064.4.) The Initial Study states that the project will involve the conversion of oak woodlands and chaparral, resulting in the destruction habitat for several species of plants and animals. The EIR must sufficiently detail these impacts and the County must develop robust mitigation plans to offset those impacts.

The Initial Study indicated that the Project will result in the conversion of 99 acres of oak woodlands. Oak woodlands are critically important ecosystems that provide habitat, sequester carbon, and maintain healthy watersheds. (Rice et al., 2008; Tietje et al., 1997; Tietje et al., 2002.) Moreover, oak woodlands provide habitat for and coincide with several sensitive plant species found on the Project site, including the federally endangered Pismo Clarkia. (Initial Study, p. 8.) The Project includes a plan to preserve 388 acres of oak woodlands and chaparral offsite to mitigate the impacts on the Project site. (*Id*.) However, the off-site mitigation proposal does not explain whether those 388 acres provide equivalent habitat value for oaks and other sensitive species, nor does the proposal indicate whether the off-site parcel is at risk of conversion or degradation and in need of further preservation. The EIR must extensively analyze and disclose impacts resulting from destruction of oak woodlands, and must develop detailed mitigation plans that sufficiently offset those impacts.

Destruction of oak woodlands runs counter to several of the County's stated policy objectives, and otherwise requires special permits and mitigation. The San Luis Obispo General Plan states that destruction and degradation of oak woodlands is a major concern, and the County has adopted numerous ordinances to preserve oaks. (San Luis Obispo General Plan, Conservation and Open Space Element, p. 70.) The South County Area Plan specifically stated that the oak woodlands on the Project site should be evaluated for long-term preservation. (South County Area Plan § 4.5.) The County's Oak Woodland Ordinance prohibits clear-cutting of more than 3 acres of oaks or destruction of more than 5 percent of a site's total canopy without a conditional use permit. (San Luis Opispo County Code § 22.58.050-060.) The County's Biological Resources Policy demands protection of oak woodlands "to the maximum extent feasible" and otherwise requires mitigation. (San Luis Obispo General Plan, Conservation and Open Space Element, p. 89.)

The proposed mitigation plan involves preservation of some on-site oaks, on-site planting of oaks, and off-site preservation of 388 acres of oak woodlands and chaparral. (Initial Study, p. 4.) These mitigation measures raise several concerns. First, on-site planting of oak trees as street trees and in recreational areas does not sufficiently offset the destruction of natural oak woodlands. Oaks planted throughout a residential development or as part of managed

recreational spaces are qualitatively different than native oak woodlands. Native oak woodlands support biodiversity and provide ecological services far beyond that provided by planted trees. (Standiford, et al. 2002; Pulido et al, 2013.) Oaks planted in developed areas do not provide contiguous habitat nor support undergrowth species at a level comparable to oak woodlands. (*Id*.) Second, it is not clear that the off-site preservation plan would protect oak woodlands that are of substantially the same character and value as the on-site woodlands. The EIR must provide a detailed analysis of the woodlands that will be converted and that analysis should inform the proposed off-site preservation plan. To serve as meaningful mitigation, the off-site preserve should provide substantially similar habitat value for oaks and other species that will be impacted by the Project. Third, it is not evident that the off-site preserve is at any risk of conversion or degradation. Preserving woodlands that are not suitable for development or conversion does not mitigate the destruction of other woodlands. The First District Court of Appeals disagreed that preservation of existing woodlands provided adequate mitigation for a project when it was not clear that such preservation was "additional" and the woodlands were not under threat of development. (*Living Rivers Council v. Cty. of Napa*, (2019) Nos. A154253, A154300, A154314, 2019 Cal. App. Unpub. Lexis 6612.) Regarding this Project, the proposed preserve is already protected by the County's oak preservation policies and it is unclear whether the proposed preserve is under threat of development.

The EIR must disclose substantial impacts resulting from destruction of oak woodlands and the County must develop a plan to sufficiently mitigate those impacts. The proposed mitigation plans do not adequately replace the ecological value provided by the woodlands on the Project site.

II. Because the Project would increase wildfire risk, the EIR must evaluate both the increased likelihood of fire and risk of more severe fire impacts.

The Initial Study and maps maintained by CalFire show that the Project site includes and is proximate to Fire Hazard Severity Zones (FHSZ). (Initial Study, p. 44.) The Project site itself is within a high FHSZ and is close to very high FHSZs. (*Id*.) California's recent wildfire seasons have been incredibly volatile and destructive, a trend that is likely to become worse with climate change. Developments in areas vulnerable to fires, including the proposed project, increase both the risk that fires will occur and the danger such fires will pose to communities. The EIR must analyze the fire risks posed by the Project, including increased probability of human-caused ignition, potential loss of life and property damage, carbon and other pollutant emissions, and ecological damage to the Project site and surrounding areas.

Continued development in California's highly fire-prone woodlands and grasslands results in the continual release of large amounts of carbon into the atmosphere by removing significant carbon sinks, increasing wildfire frequency, and degrading habitats and ecosystem function. The past few decades have seen significant housing growth near natural areas in California's wildland urban interface (*i.e*., the transition zone between human development and wildlands), including more than one million homes built between 1990 and 2010 (Radeloff et al. 2018). And scientists project that at least 640,000 to 1.2 million new homes will be built in the state's highest wildfire risk areas by 2050 under current land use practices (Mann et al. 2014). In addition, rampant fire suppression and logging since European colonization have led to an

increase in wildfire intensity and spread when fires ignite, which leads to compounding carbon release events (Bradley et al. 2016; Morrison 2019; Hanson 2020).

Almost all (95-97%) wildfires in California's Mediterranean regions are caused by humans or human infrastructure in the wildland urban interface (Syphard et al. 2007; Balch et al. 2017; Keeley and Syphard 2018; Radeloff et al. 2018; Syphard and Keeley 2019; Keeley and Syphard 2020; Syphard and Keeley 2020). For example, the 2019 Kincade Fire, 2018 Camp and Woolsey fires, and 2017 Tubbs and Thomas fires were sparked by powerlines or electrical equipment. And although many of the 2020 fires were sparked by a lightning storm, the Apple Fire was caused by sparks from a vehicle, the El Dorado Fire was caused by pyrotechnics at a gender-reveal party, and electrical equipment is suspected to have ignited the Silverado and Zogg fires. Expanding development in high fire-prone areas leads to increased risk of human ignitions while placing more people in harm's way when fires ignite (Keeley and Syphard 2019).

Progressively hotter, drier, and windier conditions and more extreme weather events due to climate change are making it easier for wildfires to ignite and spread. The number of days with extreme fire weather conditions in California has doubled since 1980, and further climate change will amplify that trend (Goss et al. 2020). Although wildfires are a natural and necessary process in California's landscapes and much of the state's diverse shrubland and grassland communities in its Mediterranean ecosystems are adapted to wildfire to varying degrees, increases in fire frequency in these systems disrupt the historical fire regimes they have evolved with. This can lead to the establishment of more flammable non-native grasses that increase fire threat over time (Keeley 2005; Keeley 2006; Syphard et al. 2009; Safford and Van de Water 2014; Syphard et al. 2018; Syphard et al. 2019) and have less carbon storage capacity than native vegetation communities (Koteen et al. 2011). Other disturbance and associated edge effects from roads and development, such as nitrogen deposition from vehicle emissions, can also lead to the establishment of such invasive grasses (Keeley et al. 2011) as well as reduced native biodiversity (Hernández et al. 2016). Thus, continued development in fire-prone wildlands ultimately perpetuates a feedback loop of increased carbon release and wildfire that fuels climate change while eliminating and degrading California's Mediterranean shrubland and grassland communities and their carbon storage potential. California is especially vulnerable with development pressures to extend the wildland urban interface into adjacent high fire-prone shrublands and grasslands. The Project would likely increase the risk of wildfire and contribute to this feedback loop, thereby further degrading local ecosystems.

The Project poses substantial risk of significant fire impacts, including increased likelihood of fire ignition, more severe loss of life and property, and higher risk of carbon and other pollutant emissions. The EIR must address these impacts and consider alternatives to the proposed project that avoid or minimize these impacts.

III. Because the Project would contribute to cumulatively significant greenhouse gas emissions, the EIR must thoroughly analyze and mitigate the Project's anticipated greenhouse gas emissions.

The Initial Study posits that the Project would generate greenhouse gas (GHG) emissions during construction and that the resulting development would produce GHG emissions. Though the quantity of GHG emissions may not be significant in a vacuum, CEQA guidelines require

analysis of a project's contribution to a cumulative impact that is significant. (CEQA Guidelines § 15130.) Climate change and GHG emissions fall under that requirement. (*Golden Door Props., LLC v. Cty. of San Diego*, (2020) 50 Cal. App. 5th 467, 264 Cal. Rptr. 3d 309.) The Initial Study does not propose any mitigation for construction-related emissions and points only vaguely to pedestrian infrastructure as a mitigation measure for GHG emissions associated with the development. The EIR must comprehensively assess the GHG emissions produced in construction, destruction of oak woodlands, residential and commercial use, and increased vehicular traffic. The County must also develop mitigation plans to offset and minimize the impacts of GHG emissions. The mitigation measures mentioned in the Initial Study are altogether inadequate.

A strong, international scientific consensus has established that human-caused climate change is causing widespread harms to human society and natural systems, and climate change threats are becoming increasingly dangerous. In a 2018 *Special Report on Global Warming of 1.5°C* from the Intergovernmental Panel on Climate Change (IPCC), the leading international scientific body for the assessment of climate change describes the devastating harms that would occur at 2°C warming, highlighting the necessity of limiting warming to 1.5°C to avoid catastrophic impacts to people and life on Earth. The report provides overwhelming evidence that climate hazards are more urgent and more severe than previously thought, and that aggressive reductions in emissions within the next decade are essential to avoid the most devastating climate change harms.

The impacts of climate change will be felt by humans and wildlife. In California, climate change will transform our climate, resulting in such impacts as increased temperatures and wildfires, and a reduction in snowpack and precipitation levels and water availability. In light of inadequate action on the national level, California has taken steps through legislation and regulation to fight climate change and reduce statewide GHG emissions. (Health & Saf. Code § 38550; *see also* Executive Order B-30-15 (2015); Executive Order S-3-05 (2005); Executive Order B-55-18 (2018).) Enforcement and compliance with these state-level actions are essential to help stabilize the climate and avoid catastrophic impacts to our environment. However, regional and municipal agencies also have a vital role in reducing our GHG emissions and fighting the climate crisis. Fundamental changes and hard choices in land use planning for the future by local land use agencies will be necessary to fully address and meet the state GHG emissions reduction goals.

Therefore, if the County concludes the Project will have significant GHG impacts, the Center urges the adoption of mitigation measures to reduce GHG emissions to net zero, with a priority given to direct emission reduction measures and on-site mitigation measures. The EIR must also account for greenhouse gas impacts of increased travel to the Project, and mitigate those impacts to the greatest extent feasible. If offsets are used as GHG mitigation, they should only be used when all direct emission reduction measures and on-site mitigation options are exhausted. Any offsets should be tied to local projects and allow for local direct investments that help the surrounding community through the creation of local jobs, reduction in nearby air pollution, and improve impacted infrastructure.

The EIR must also account for the climate impacts of removing native vegetation. The removal and degradation oak woodland and chaparral landscapes would result in large amounts of carbon release. Above-ground biomass of these woodlands and shrub communities were found to be as high as 3461 g/m^2, with the amount of carbon stored increasing with the age of the stand (Bohlman et al. 2018). In addition, a substantial amount of carbon may be stored belowground in their roots and in the microbial communities and symbiotic fungi that are associated with the roots (Bohlman et al. 2018; Kravchenko et al. 2019; Soudzilovskaia et al. 2019). The removal and degradation of these systems have been found to result in the loss of both above- and below-ground carbon storage (*e.g.*, Austreng 2012). And although these systems are often overlooked in the fight against climate change, they are adapted to hot and dry weather conditions and have been found to be resilient to drought (Luo et al. 2007; Vicente-Serrano et al. 2013), which makes them an untapped opportunity to sequester more carbon as the climate crisis becomes exceedingly urgent. Therefore, the County should be prioritizing the preservation of carbon in existing ecosystems instead of releasing more greenhouse gases and destroying habitats with carbon storage potential for a Project that would destroy native ecosystems and exacerbate traffic congestion and air pollution.

In a November 2018 report, the California Air Resources Board concluded that California is currently not on track to meet its greenhouse gas reduction targets, primarily due to GHG emissions from the transportation sector. Projects such as the one proposed in the NOP have the potential to widen the gap between where California needs to be to tackle the climate crisis and where it is headed. Therefore, the Center urges the County to take a hard and thorough look at the Project's anticipated GHG emissions, as well as associated air quality, traffic, and transportation impacts, when preparing the EIR, and consider mitigation measures and alternatives to avoid or minimize these impacts.

IV. Conclusion

Given the possibility that the Center will be required to pursue appropriate legal remedies to ensure enforcement of CEQA, we would like to remind the County of its duty to maintain and preserve all documents and communications that may constitute part of the "administrative record" for this Project. As you may know, the administrative record encompasses any and all documents and communications which relate to any and all actions taken by the County with respect to the Project, and includes "pretty much everything that ever came near a proposed [project] or [] the agency's compliance with CEQA . . . ." (*County of Orange v. Superior Court* (2003) 113 Cal.App.4th 1, 8.) The administrative record further contains all correspondence, emails, and text messages sent to or received by the County's representatives or employees, which relate to the Project, including any correspondence, emails, and text messages sent between the County's representatives or employees and the project proponent's representatives or employees. Maintenance and preservation of the administrative record requires that, inter alia, the County (1) suspend all data destruction policies; and (2) preserve all relevant hardware unless an exact replica of each file is made.

Thank you for the opportunity to submit comments on the NOP for the Dana Reserve Specific Plan. The Center is deeply concerned by the potentially significant environmental impacts of the proposed Project. We urge the County to carefully prepare an EIR and associated mitigation plans for public review and comment so that the extent of Project impacts can be assessed in a legally compliant manner. Please include Center attorney J.P. Rose (jrose@biologicaldiversity.org) on the County's notice list for all future updates, notices, and materials associated with the Project and its environmental review, and do not hesitate to contact the Center with any questions at the email listed below.

Sincerely,

J.P. Rose
Senior Attorney
Center for Biological Diversity
660 S. Figueroa Street, Suite 1000
Los Angeles, California 90017
jrose@biologicaldiversity.org

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Mail: P.O. Box 1014
San Luis Obispo, CA 93406
Office: 1012 Pacific St., Ste B-1
San Luis Obispo, CA 93401

ENVIRONMENTAL CENTER
OF SAN LUIS OBISPO

Phone: (805) 544-1777
Email: info@ecoslo.org
Online: www.ECOSLO.org

Protecting and preserving San Luis Obispo County's natural environment since 1971

To Whom It May Concern,

As a representative of the Environmental Center of San Luis Obispo (ECOSLO), I am writing to encourage that equal consideration be given to a reduced project alternative for the Dana Reserve Specific Plan (DRSP) when developing the Environmental Impact Report (EIR), and to ensure that SWCA Environmental Consultants conducts equal amounts of environmental analysis for a reduced project alternative as the project itself.

The Dana Reserve Project is located on 288 acres of undeveloped land in the Nipomo community. The region's mediterranean climate makes it a suitable habitat for many unique flora and fauna. The proposed Project site itself is characterized by open grasslands, oak savannahs on gently rolling hills, and oak woodlands along several steeper slopes along with small clusters of native plants. The Project site is located just a few miles inland of the world's largest intact coastal dune ecosystems, which has been a flashpoint for conflict between community groups and state agencies for decades. Development of this unique site will result in irreversible environmental impacts, as the Project is proposing the removal of an estimated 99 acres of oak woodland and approximately 2.5 acres of scattered oak canopy. This will negatively impact local species that rely on the oak woodland habitat and conflicts with local policies and ordinances. The proposed project has the potential to disturb special-status plant and animal species and their habitats as well as increase erosion and/or polluted stormwater runoff that will have a negative impact on nearby wetland, riparian, or other sensitive natural communities.

In addition to the adverse environmental impacts that the Project will incur, the currently proposed mitigation measures are not enough to mitigate the potential negative impacts to the oak woodland habitat on site. The DRSP outlines mitigation efforts that provide an off-site oak and chaparral habitat mitigation site, which will not make up for the unique habitat loss.

As such, ECOSLO is urging that equal analysis be conducted on a reduced project alternative for the DRSP EIR. We firmly believe that a reduced project alternative is the only way to truly reduce the resulting significant environmental impacts that will negatively affect the Nipomo community.

Thank you for your attention to this matter,

Grant Helete, Community Organizer
ECOSLO - Environmental Center of San Luis Obispo

LEAGUE OF WOMEN VOTERS®
OF SAN LUIS OBISPO COUNTY

Ms. Jennifer Guetschow
Department of Planning and Building
County of San Luis Obispo
976 Osos Street, Room 300
San Luis Obispo, CA. 93408

RE: Dana Reserve Specific Plan and Environmental Impact Report

Transmitted via email: jguetschow@co.slo.ca.us

Dear Ms. Guetschow:

The League of Women Voters of San Luis Obispo County (LWV-SLO) has followed the proposal for urban development of the 288 acre Dana Reserve project. We offer the following requests for evaluation in the project's Environmental Impact Report (EIR).

1. Biological impacts. The project proposes to develop between 1,200 and 1,300 dwelling units, and certain commercial development covering approximately 75% (210 acres) of the site. A conditional use permit is being requested as part of the project to allow the removal of over 3,400 mature oak trees and associated vegetation and wildlife habitat. Proposed mitigation appears to be offered in the form of dedication of an off-site property some miles away. We are uncertain as to the propriety of such mitigation, as conservation of that site does not in fact create any new oak woodland or other habitat to replace that which is proposed to be removed. Therefore we request a detailed study and discussion of this unusual mitigation, and whether it does in fact provide appropriate mitigation for identified impacts upon native woodland and shrub habitat, and upon rare or endangered plant and animal species.

2. Neighborhood Compatibility and Regional Housing Needs Allocation. The project proposes a significant change in the existing County General Plan. The proposal is in sharp contrast to existing surrounding development, being much denser, and the project is being promulgated at least in part to meet certain housing needs for the unincorporated areas of the County. We therefore request an analysis of those needs, and what the proper share of those needs for the Nipomo area would be if proportionally distributed throughout the unincorporated areas of the County.

3. Water Availability. There is some uncertainty about the availability of water in the Nipomo Mesa area. Local measurements have shown a decline in the groundwater

table on the Mesa over the past ten years and imported water may or may not be able to stem or reverse this decline if such water will in fact be available in the future. Therefore we request a detailed analysis of the current status of the area's water supply, historical trends, future prospects, especially in the event of continued drought, and how the proposed project will affect these matters.

Thank you for the opportunity to comment on this project EIR.

Sincerely,

Cindy Marie Absey, President
League of Women Voters of San Luis Obispo County

RE: [EXT]RE: Inquiry regarding property at 886 Hetrick [EIR Submission]

Eric Lykens <elykens@charter.net>

Thu 7/15/2021 7:03 AM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Jennifer,

Thank you for taking my call yesterday. I'm concerned that the Dana Reserve Developers have already made a decision for me to abandoned my private easement. Of course this is not acceptable to me. Please add these to the EIR and where appropriate.

Here's my list of items for the EIR:

- The proposed Collector B off of Pomeroy and distance to the "private driveway" or easement of 886 Hetrick Avenue.
  - The collector B intersection has been proposed to be roughly thirty feet off of the corner of Pomeroy and Hetrick Avenue. Hetrick Avenue at this location is not in San Luis Obispo road system and is only a "private" easement of 886 Hetrick Avenue residence. A proposed alternate easement approach called "Access Drive" on drawing section 2-5 has been proposed by the Dana Reserve developer, but has not been accepted by the current home owner at 886 Hetrick Avenue and will not be used. Also on page **4.4.3** Dana Reserve Developer is making a statement on my rights as an easement owner. Here is the direct statement**: "Currently, Hetrick Avenue right-of-way at the southwest corner of the property near Pomeroy road would be abandoned, re-routed, or deeded to the adjacent existing residential property owners to the west. Access for the three (3) existing residential properties to the west of Hetrick Avenue, most immediate to Pomeroy Road, would be maintained via a connection to Collector B." In section 5.7.2 it repeats the statement "Currently at the southwest corner of the DRSP, Hetrick Avenue is an existing driveway, with a 30-ft right-of-way, which would be abandoned, rerouted to Collector 'B' or deeded to the adjacent existing residential property owners to the west".** It is the intent of the owner at 886 Hetrick Avenue to continue to retain his right of way on to Pomeroy from his private easement.
  - I would like the record to show that the owners of 886 Hetrick Avenue have not given up their right to their "Private" easement and access directly onto Pomeroy.

- Corner basin elevation at the corner of Pomeroy and 886 Hetrick Avenue.
  - Hydrology/Flood Hazards: NBD-8 and NBD-7 have roughly 220 homes at a 60% lot coverage along with road and sidewalk coverage reducing rain water percolation directly into the ground. The direct run off of these homes and roadways will fill two small 8 foot basins (Zone B). What will be the overflow plan and will a levy be required along the west boundary of Zone B? The easement elevation between properties is level at roughly 70 feet off of Pomeroy where the retention basin will be level with the 886 Hetrick property. Currently during winter months standing water after a few days of rain stays above ground at the proposed Connector B location for a day or two. The run off comes from the Pomeroy culvert currently. Before the basin overflows where will the water be pumped too? the next lower elevation is 886 Hetrick.

- Noise concerns with roughly 2400 hundred additional cars on Pomeroy from the Dana Reserve project.
  - How will Dana Reserve mitigate the additional road noise at the Connector B location on existing neighbors?

- Proposed Pomeroy road widening from the Connector B intersection through the property end of 886 Hetrick southwest corner.
  - Current roadway is 15 feet from 886 Hetrick south property line and 5 feet from 910 Calle De Topo north property line. Its not currently in the Dana Reserve document but the county has a proposed new road redesign on file. A third lane has been proposed and additional space will be required to accommodate this lane. It will be a left turn lane heading east widening the road from west back yard property line of 886 Hetrick Avenue up to Connector B that will directly impact Neighbors that use the 886 Hetrick Private easement onto Pomeroy. Property owner of 886 Hetrick has second Pomeroy driveway at the west backyard property line. How will this access be impacted with this additional third lane and access rights to this driveway?
  - How will neighbors of Calle De Topo and three neighbors of 886 Hetrick Avenue be allowed right of way?
  - Cross traffic hazard are a concern for neighbors of Calle De Topo and Hetrick Avenue with this proposed new road.

- Light pollution
  - Dana Reserve project currently does not propose a light pollution plan. How will this project mitigate light pollution from streetlights, commercial building, single and multihomed dwellings on to current neighbors properties and flood the night sky with unwanted light pollution?

Thank you,
Eric Lykens

From: Jennifer Guetschow
Sent: Tuesday, July 13, 2021 4:18 PM
To: Charter
Subject: RE: [EXT]RE: Inquiry regarding property at 886 Hetrick

Good afternoon,

The Scoping meeting is being held Tuesday, January 19th P.M. and access to the virtual meeting link will be on our website shortly. Comments for the scoping meeting, which you were noticed about, should focus on environmental concerns. Other concerns will be addressed in the Specific Plan review with the Planning Commission and Board of Supervisors when the project moves forward to those hearing bodies. You are welcome to submit environmentally-focused comments/questions to me if you cannot attend, or do not want to participate in, the scoping meeting. I hope this information is helpful to you.

Jennifer

From: Charter <elykens@charter.net>
Sent: Tuesday, July 13, 2021 1:20 PM
To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>
Subject: Re: [EXT]RE: Inquiry regarding property at 886 Hetrick

Jennifer,

I received a letter from you for the EIR meeting coming up. Do I need to submit to you my concerns about the Dana Reserve project? My concerns are about the widening of Pomeroy, road noise, congestion, and easement modifications to the area surrounding 886 Hetrick Ave. I am not sure what is all covered in a EIR. Probably more environmental concerns not personal property concerns.

Thank you,
Eric Lykens.

Sent from my iPhone

> On Apr 9, 2021, at 4:39 PM, Eric Lykens <elykens@charter.net> wrote:
>
> Jennifer,
>
> Thank you for all this good information. I discussed this proposal with Nick Tompkins the property owner of the Dana Reserve project. The three of us neighbors that use this road are opposed to this design. What it will bring is extra traffic on to our easement we currently have to manage now along with a potential 1200 homes times two cars accessing our property. Our proposal is to gate Hetrick 20-30 feet off of Pomeroy and allow us to use our driveway like the neighbors directly across from this proposed entrance. Connector B appears to be 30 feet off of my drive way if it were to be built. I don't see how me leaving my property would be any safer than my neighbors directly across from me. The proposed B connector could create a dangerous situation with a lot of cross traffic, not from me but all that use Pomeroy. When the traffic study is done the county will then know what the potential danger will be to the proposed connector B and the cross traffic speeds will be during peak times of the day. Current rates of speed down this stretch of road are around 40-50 miles an hour based on me being pushed down the road if I am not going these speeds currently. RMM design doesn't care about the rights of us as current owners just that they get this project through and this section of road will become dangerous to current Sandydale and Calle De Topo neighbors directly across from this intersection. Nick seems to be a good guy and is taking the recommendation of RRM to make this work and I don't oppose the project in general. But to propose a road directly on my fence line and remove my 300 year old oak trees to make this work is unacceptable to me as a new approach to my property. I also think of my property value and having it attached to a project entrance like this.
>
> I am also pretty concerned about the size of the basin directly at my property level capturing all of the Pomeroy road water currently and the lost of percolation space the houses and roads above me will reduce. The basin design must be levied on the Dana Reserves west basin wall along the property line to not allow this basins overflow to cross onto my property. RMM says it's a 100 year rated basin but the connector B is going to be much higher than my property and when RMM is long gone my property will be the one with the problem.
>
> Thank you,
> Eric Lykens
>
> Sent from Mail for Windows 10

From: Jennifer Guetschow
Sent: Friday, April 9, 2021 1:42 PM
To: Eric Lykens
Cc: Brian Pedrotti
Subject: Re: [EXT]RE: Inquiry regarding property at 886 Hetrick

Good afternoon Mr. Lykens,

I have checked with the Development Services Manager in the County Public Works Department. The County does not maintain this portion of Hetrick. It is a road that was originally offered to the public on an old subdivision map (~1880s), but never accepted by the County into the maintained roadway system. In such cases, it is our understanding that fronting property owners of the offered road retain private access rights. As such, the County would not be able to extinguish those rights or eliminate access back to a County road.

That being said, the Dana Reserve project proposes to construct a new north-south collector road near this location connecting Pomeroy with Willow, through the subject property. Because this new road connection to Pomeroy may present vehicular turning conflicts with vehicles entering/exiting Hetrick, we have asked the applicant to present alternatives. One such alternative is to provide a new point of access to Hetrick from the new collector road and to close the Hetrick/Pomeroy intersection. We have not "approved" a concept plan, but it will be an option that is analyzed as we look at all of the traffic impacts related to the project.

The applicant provided staff with a proposal for the Hetrick/Collector B connection - please see the attachment. It has **not** been reviewed/approved by the County as this will be part of the EIR analysis coming in the next several months. We would appreciate your thoughts as we move forward. I hope this information is useful to you and helps answer your questions.

I will add your email to the "Interested Parties" contact list for updates with the Dana Reserve Project.

Thank you,
Jennifer

Jennifer Guetschow | **Senior Planner**

Long Range Division

(p) 805-788-2352 jguetschow@co.slo.ca.us

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From: Eric Lykens <elykens@charter.net>
Sent: Friday, April 9, 2021 12:59 PM
To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>
Subject: RE: [EXT]RE: Inquiry regarding property at 886 Hetrick

Thank you Jennifer, yes a project this size and at my front gate makes me worry what my road will become.

Sent from Mail for Windows 10

From: Jennifer Guetschow
Sent: Friday, April 9, 2021 9:09 AM
To: Eric Lykens
Subject: Re: [EXT]RE: Inquiry regarding property at 886 Hetrick

Good morning,
I wanted to reach out and let you know that I am working on a comprehensive response to you and I hope to send an email update by the end of the day today or Monday. This is still on my radar and you have not been forgotten. Thank you for your patience as we navigate responses to inquiries and comments about Dana Reserve.

Thank you,
Jennifer

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From: Eric Lykens <elykens@charter.net>
Sent: Saturday, April 3, 2021 9:51 PM
To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>
Subject: RE: [EXT]RE: Inquiry regarding property at 886 Hetrick

Jennifer,

A few months back I had a conversation with Stephanie Fuhs on the new Dana Reserve project and our conversation is below. I was told by Nick Tompkins the property owner of the Dana Reserve project that the county will Hetrick Ave. Hetrick Ave is about 80 feet from the new proposed road entrance off of Pomeroy just east of Hetrick. Stephanie tells me that the county doesnt maintain Hetrick as a county road any longer so how would the county close it? SLO county has a stop sign at the top of Hetrick and 15 feet of asphalt until it turns to dirt which is the easement between Nick and I. The currently proposal is if the county approves the Dana Reserve project my road will be closed which would impact three houses that use this dirt road. Does the county just in the books abandon the first 15 feet take the stop sign and not recognize my address anymore? How will I and my other two neighbors get off of our property's? would this be a question for Public Works? I would like to get an answer to this before the Dana Reserve gets started. Last question how do I find out how the county now has the easement recorded between my property and Nick Tompkins property (Dana Reserve). Is it recorded as public or a private easement? as Stephanie mentions below. If it truly is private as Stephanie has stated than I should be able to still use it as my driveway the way it was designed in 1984 and allow my neighbors to continue to cross over my easement.

"**From:** Stephanie Fuhs
Sent: Tuesday, December 22, 2020 5:08 PM
To: elykens@charter.net
Subject: Inquiry regarding property at 886 Hetrick

"Hi Eric,
I received your message regarding the property at 886 Hetrick Avenue.

Hetrick Avenue is not a county maintained road, so this is a private civil matter between property owners, the County would not be involved unless the driveway would involve grading/site disturbance over 10% slope or over 5,000 cubic yards in which case you would need a grading permit. "

From: Stephanie Fuhs <sfuhs@co.slo.ca.us>
Sent: Tuesday, January 05, 2021 7:38 AM
To: Eric Lykens <elykens@charter.net>; Eric Lykens <lykense@lompocvmc.com>
Subject: Re: [EXT]RE: Inquiry regarding property at 886 Hetrick

CAUTION: This email was sent from outside LVMC. Do not click links or open attachments unless you are expecting the content and know it is safe.

Hi Eric,
All of the road matters are private and should be handled between the land owners and perhaps a real estate attorney. Fences taller than 3 feet need to be placed 25 feet from the property line.

County of San Luis Obispo

Department of Planning and Building

Stephanie Fuhs

Planner

976 Osos Street, Room 300

San Luis Obispo, CA 93408

(805) 781-5721

sfuhs@co.slo.ca.us

Thank you,
Eric Lykens
886 Hetrick Ave, Nipomo, CA
805-588-5729

From: Stephanie Fuhs
Sent: Tuesday, January 5, 2021 12:47 PM
To: Eric Lykens; Eric Lykens
Subject: Re: [EXT]RE: Inquiry regarding property at 886 Hetrick

I haven't seen any of the plans for subdivision or development, so I don't know which way the parcels will be oriented. The 3-foot height limit is for front setbacks, if it is a rear or side setback the fence can be 6 feet, 6 inches. As for road offers of dedication or widening, that is a determination made by public works, not planning.

County of San Luis Obispo

Department of Planning and Building

Stephanie Fuhs

Planner

976 Osos Street, Room 300

San Luis Obispo, CA 93408

(805) 781-5721

sfuhs@co.slo.ca.us

I am currently working remotely and the best way to reach me is by email.
For updates on COVID-19 in SLO County: Visit ReadySLO.org or call the recorded Public Health Information Line at (805) 788-2903. A staffed phone assistance center at (805) 543-2444 is available seven (7) days a week from 8 a.m. to 5 p.m. for questions related to COVID-19.

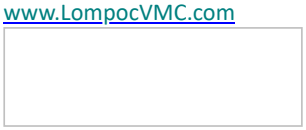
From: Eric Lykens <lykense@lompocvmc.com>
Sent: Tuesday, January 5, 2021 9:16 AM
To: Stephanie Fuhs <sfuhs@co.slo.ca.us>; Eric Lykens <elykens@charter.net>
Subject: RE: [EXT]RE: Inquiry regarding property at 886 Hetrick

Stephanie,

Thank you, we got notice of this project this summer and directed to the website via a flyer. The fences taller that 3 feet rule will be in relation to when NKT places new homes across from me that set back will need to be 25 feet inside of Dana's property line correct. Creating an easement essentially inside of his own property? Because the current easement between us is 60 between us, would that allow NKT to take 5 feet of the current easement away? That would remove the road the two neighbors above me have. Thank you again for you help and sorry to bother you.

Eric Lykens
Senior System Analyst
Lompoc Valley Medical Center
1515 E Ocean Ave

Lompoc, CA 93436
P. (805) 737-5729
C. (805) 588-5729
www.LompocVMC.com



From: Stephanie Fuhs <sfuhs@co.slo.ca.us>
Sent: Tuesday, January 05, 2021 7:38 AM
To: Eric Lykens <elykens@charter.net>; Eric Lykens <lykense@lompocvmc.com>
Subject: Re: [EXT]RE: Inquiry regarding property at 886 Hetrick

Hi Eric,
All of the road matters are private and should be handled between the land owners and perhaps a real estate attorney. Fences taller than 3 feet need to be placed 25 feet from the property line.

As for the Dana project, actual construction is a few years off. The applicant will need to work with the planning department to develop a specific plan for development, have an environmental impact report prepared, then have the subdivision and conditional use permit reviewed and approved. All of these steps have ample opportunity to provide public comments on the proposed project. The planner assigned to the project is Jennifer Guetschow (jguetschow@co.slo.ca.us). The applicant's representative is RRM Design Group (805) 543-1794 and the owner shows at NKT Development, LLC, 684 Higuera Street, SLO, CA 93401. These contacts will be aware of any public meetings.

Drainage will be reviewed by the Public Works Department and the Building Division. It will include retaining all new drainage on site and completion of a stormwater management plan and stormwater pollution prevention plan.

County of San Luis Obispo

Department of Planning and Building

Stephanie Fuhs

Planner

976 Osos Street, Room 300

San Luis Obispo, CA 93408

(805) 781-5721

sfuhs@co.slo.ca.us

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From: Eric Lykens <elykens@charter.net>
Sent: Tuesday, January 5, 2021 12:07 AM
To: Stephanie Fuhs <sfuhs@co.slo.ca.us>; lykense@lompocvmc.com <lykense@lompocvmc.com>
Subject: [EXT]RE: Inquiry regarding property at 886 Hetrick

Stephanie,

I am not sure if you got a chance to review my email below, but I had a few more question on how the county determines who owns this easement between properties when the county no longer has interest in it. This is an additional 62 feet of space and I have a more than a few question below about it. When my house was built, Hetrick Ave only served my house and road past it turns into a walking path 200 feet past my property. I review the Dana Reserve homes proposed and I have a concern about the water run off that will be directly in front of my property. When that basin fills and it will, where will the water go? My property is currently at the same elevation as Dana's property. Where is this waters spillway if not on to my property? As you know when pads are created for homes and asphalt and concrete collect the water instead of the sand that basin will quickly fill. What is Dana proposed use of the boundary of our two properties as far as fencing material? Wood, Block Wall, etc. Current in the design its not specified where most current housing West and South of this development will be. I know you tell me this is a civil matter, but the county must have some interest in how this track will be built down this property line.

Thank you,
Eric Lykens
805-588-5729

Sent from Mail for Windows 10

From: Eric Lykens
Sent: Tuesday, December 22, 2020 7:22 PM
To: Stephanie Fuhs
Subject: RE: Inquiry regarding property at 886 Hetrick

Stephanie,

Thank you for your reply. Between my property and the Dana property which is going to be developed next year, Dana and I share 60 feet of space between properties. I have a few questions I hope you can help me answer.

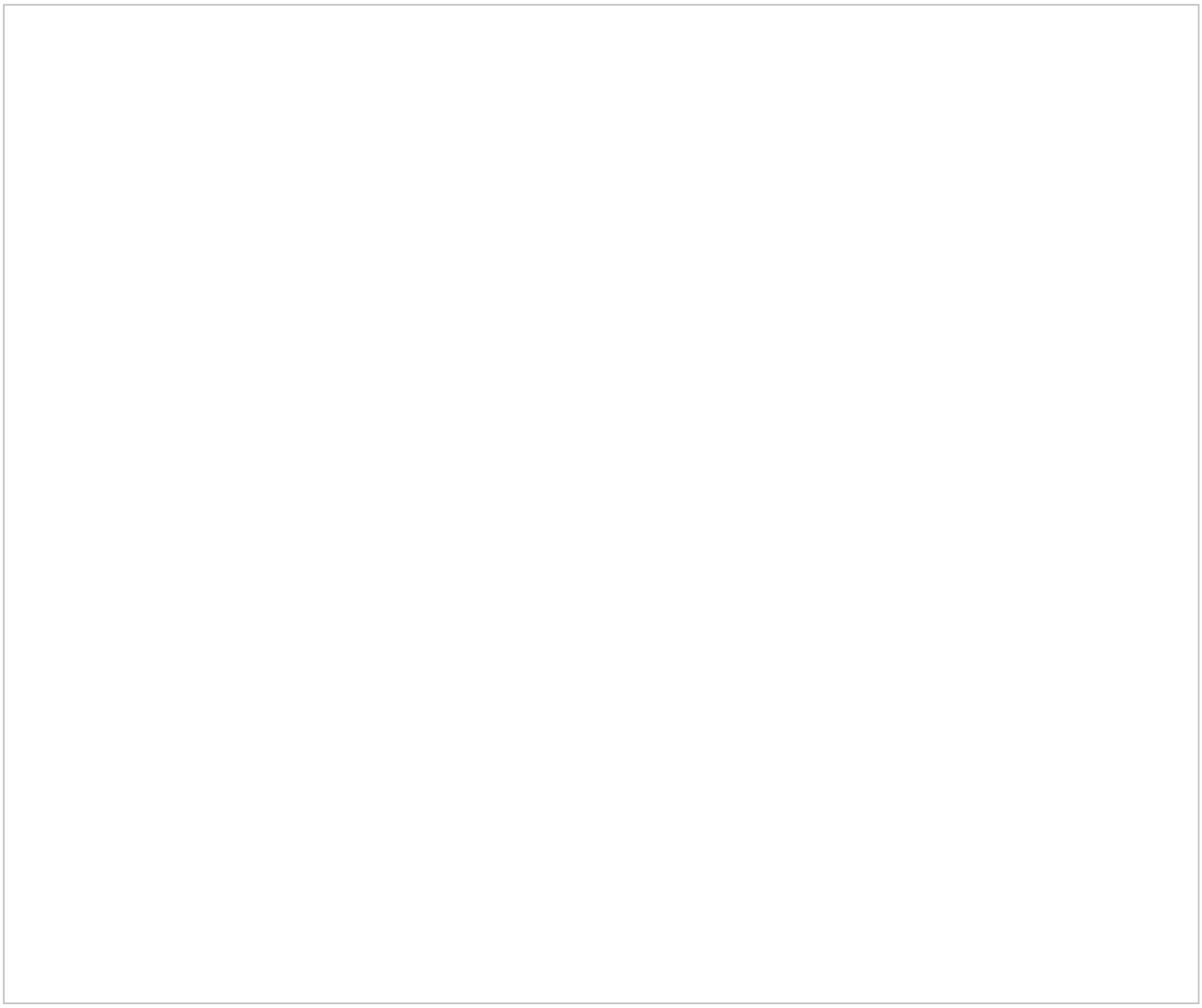
- Who owns that property? Since the county doesn't own it and its outside of both of our property lines is it additional land that I share with Dana?

- How can this space be managed, fenced, roads, etc.

- I have an Oak tree on my side of this space and my neighbors above me on Calimex have created a road that goes down Dana's side of the property above me. This requires them to come across Dana and my property's. Do these two land owners have easement rights to Dana and my property? 858 Hetrick Ave was created right before the last owner sold the property and created a road above connecting above address 873 / 867 Calimex Place

- Currently my fence is 18 feet off of the Hetrick Ave road, what is the minimum offset to this road? Red line that I have at top. This is where I am thinking of placing a gate.

Why I have so many questions is the traffic burden I will soon have with this Dana devolpement. It will create additional traffic that will miss the proposed new road just above mine. Currently I have around 10 cars a day that come down onto my property because they think Hetrick goes through to upper Hetrick. I am considering gating the entrance to close the road. I am not opposed to my neighbors above me having access to this gate. But the road that they have created is on Dana side of this 60 foot expanse hasn't been a problem, but they would also would like to know. Last question how do I get ahold of the Dana's since no one currently living on the property and is there a public meeting coming up to address concerns about this new development. I find this will probably impact me the most so I need to know what my options are.



Thank you,
Eric Lykens
805-588-5729

Sent from Mail for Windows 10

From: Stephanie Fuhs
Sent: Tuesday, December 22, 2020 5:08 PM
To: elykens@charter.net
Subject: Inquiry regarding property at 886 Hetrick

Hi Eric,
I received your message regarding the property at 886 Hetrick Avenue.

Hetrick Avenue is not a county maintained road, so this is a private civil matter between property owners, the County would not be involved unless the driveway would involve grading/site disturbance over 10% slope or over 5,000 cubic yards in which case you would need a grading permit.

County of San Luis Obispo

Department of Planning and Building

Stephanie Fuhs

Planner

976 Osos Street, Room 300

San Luis Obispo, CA 93408

(805) 781-5721

sfuhs@co.slo.ca.us

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[EXT]Notice of Preparation of a Draft Environmental Impact Report for the Dana Reserve Specific Plan

Tallman, Karen L <Karen.Tallman@charter.com>

Fri 7/16/2021 9:33 AM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Hi Jennifer,

My name is Karen Tallman, my husband James and I live at 858 Hetrick Ave, the third property east of Pomeroy Rd. We are concerned with the plans pertaining to having access to and from our residence. We have a county approved address with a mailbox at the corner of Pomeroy Rd and Hetrick Ave. We have lived here for years and was not aware the easement did not extend to our entrance. This road is our only access in and out, we are extremely worried about these upcoming plans. For more information or questions you can email me or contact me at 661 978-0521.

Thanks,

Karen Tallman

[EXT]Fwd: Dana Reserve Environmental Impact Report

richard hartwig <hartwighome@att.net>

Fri 7/16/2021 11:21 AM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Sent from my iPhone

Begin forwarded message:

From: richard hartwig <hartwighome@att.net>
Date: July 16, 2021 at 11:19:24 AM PDT
To: Joyce Hartwig <hartwighome@att.net>
Subject: Fwd: Dana Reserve Environmental Impact Report

Sent from my iPhone

Begin forwarded message:

From: richard hartwig <hartwighome@att.net>
Date: July 15, 2021 at 10:03:28 AM PDT
To: jquetschow@co.slo.ca.us
Subject: Dana Reserve Environmental Impact Report

As a resident of Nipomo for 45 years, I have seen and expect growth for the community. I'm not opposed to growth but not sure if a development of this size with so many houses and planned new businesses is a good idea at this time.

We are already dealing with extreme traffic conditions and concerns about safety in residential areas throughout Nipomo and bringing in such a large volume of homes and businesses will only add to the problem.

Another concern is the need for additional water at this time during an unprecedented drought in our state and the entire western region. I'm not sure how we can safely allow more demands on our water resources.

Therefore, I'm hoping for a denial from the county to allow such a large development.

Thank you,

Richard and Joyce Hartwig
Nipomo, Ca.
July 15, 2021

Sent from my iPhone

[EXT]Dana Reserve

angie mello <angmello@hotmail.com>

Mon 7/19/2021 4:24 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Hi Jennifer,

Thank you for taking the time to read my email. I truly appreciate it. I have been told many times it is not good to assume anything, so I would be remiss if I didn't take some time to share how important the Dana Reserve is to the Nipomo Community and the surrounding communities at large.

I have been a member of this community my entire life. My 98 year old grandmother has lived in Nipomo her entire life and her roots are generations deep.

I am a single income homeowner in the city of Arroyo Grande, have served and am currently serving on community boards, and have live here for over 45 years.

I am 100% positive that we need to do everything possible to make the Dana Reserve a reality.

We need affordable FAMILY housing to both buy and rent. The Dana Reserve does this with over 1,300 homes. I know so many single and young families that want to come back to the area or know a good thing when they experience it.

I know that both the Santa Maria and Arroyo Grande rotating hospital staff struggle to find housing which affects us all.

We are in short supply of parks and trails. Biking and hiking is at an all time high.

If done well it should elevate some horrible(I speak from experience) Nipomo traffic.

A Cuesta College campus would be beneficial in so many ways. I know for a fact several students who attend are from the Nipomo and Arroyo Grande area. A closer campus would reduce traffic and pollution.

Nipomo is ready for affordable family growth. The benefits of this project will be seen for generations to come for both the San Luis Obispo and Santa Barbara counties.

Thank you again for your time.

Sincerely,

Angie Mello

[EXT]Dana Reserve Specific Plan

Audrey Lariz <audrey.e.lariz@gmail.com>

Mon 7/19/2021 3:42 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

I'm writing to urge the approval of the Dana Reserve Specific Plan. This county continues to need housing of all types and this project will provide next-generation housing with incredible amenities that people desperately need. This project is well thought out and will serve a great need in our community. Please keep this project moving forward as quickly as possible.

Regards,

Audrey Lariz
SLO County Resident

--

Audrey Lariz (Bigelow)
she/her
audrey.e.lariz@gmail.com
(805) 704-2489

[EXT]A resident of SLO county, in Cambria-on Dana Reserve :)

David Horwitz <daveed-ari-4hateva@pacbell.net>

Sun 7/18/2021 9:04 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Dear Jennifer Guetschow,

I am a resident of Cambria, and dearly love the entire central coast of California. I am writing to you today, to discuss the project you're heading. It is my understanding that the Dana Reserve seeks to develop 100 acres of wild oak woodland and coastal shrub-land. While I dearly support the need for housing in our ever growing and expanding state, this area is a dangerous place to develop in for a few reasons. One, which you will likely hear others mention, is it is fire prone. Both oak woodland, and chaparral are prone to burn frequently, but this is the catch, only when disturbed by weeds and soil upheaval. Left alone, they are resilient to mega fires like we've been experiencing in the Sierra foothills, and southern coastal chaparral. They essentially take a lot to burn, and naturally, are only prone to burn every few decades to a few centuries. *If you take a bulldozer to the oak soil biomes' mycorrhizal fungal symbionts, little fungi underground that thread the soil together to transfer water and nutrients to the oak trees, upheaving the ground for construction purposes, more weeds than the introduced grasses capitalize on the easy takings of not having to navigate unfriendly fungi to them, that are friendly to oaks and the plants that have grown with em' for thousands of years. These weeds you'll see show up at the Dana Reserve, are things like star thistle, bull thistle, milk thistle, mustard, and prickly lettuce.* **This matters, because these weeds burn HOT AND FAST! You'll lose the whole venture, all the money you put into it, not too long after its been finished. It might take anywhere from a few years to arrive at the state of diminished health, maybe a decade at most, but it will get there. It has in other developments in the state, such as the Creek Fire, or the fires of recent, around Southern California developments. And eventually, the whole project will burn down, as chaparral and oak studded with these and other WEEDS BURN REALLY HOT AND REALLY FAST. This has been documented by scientists and ecologists across the state. You may think, "someone has to start the fire, right?" Not really. Old cars that spark, an electricity pole that sparks from PG&E, a careless new resident having a BBQ, someone having a cigarette or cigar smoke, or even a homeless person who is camped illegally nearby and has to burn something to keep cool in the coastal lows of a summer's night, all would enable a fire to start.**

Last thing to consider—we on the central coast don't want the traffic and quaintness of a lower populace that brings us so much peace from modern life's hectic drill-neck pace. That, though, is really an after thought. We mostly don't want the smoke and air pollution from burning homes.

Consider this is to help you know that you, for the sake of everyone in Nipomo, and SLO, must challenge your superiors on this, and remind them, it's expensive to rebuild. A LOT MORE EXPENSIVE THAN THE FIRST BUILDING PROCESS. **THERE ARE ALTERNATIVES. There will be folks discussing those at the Zoom meeting, Monday, July 19, tomorrow.**

Please, for your sake, your company's sake, and the people of Nipomo and SLO as a whole's sake, don't let this happen. Don't be a cause for pollution by a natural disaster, unintentionally and indirectly. **Build where it's FIRE SAFE. Wilds are generally not the place.**

-Concerned Cambrian Citizen

[EXT]Central coast needs housing.

Jared Worthen <jaredwworthen@gmail.com>

Mon 7/19/2021 10:45 AM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Hi,

My wife and I just finished a search for our first home for our family and it was a brutal process. There is a huge shortage of homes especially entry level family homes. Any additional housing, especially homes that can house the next generation of central coast families, is a win for the coast and Nipomo.

Can't wait to see this project move forward!

Jared

[EXT]Dana Reserve EIR Scoping Meeting 07/19/2021

John Siemens <john.c.siemens@gmail.com>

Mon 7/19/2021 12:22 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

To Whom It May Concern,

I am a LIcensed Marriage Family Therapist with a private practise. It has become alarmingly apparent the numbers of families that cannot find housing in the SLO county. We need housing! Especially affordable housing. The Dana Reserve community appears to provide an outlet for the housing gap that is poorly met in our locale. It will not only provide needed domiciles, but will do so offering a unique balance of diverse housing and environmental forethought that appear to be congruent with the lifestyle consciousness we hope to promote in our neighborhood.

Thank you.

John Siemens, MS, LMFT

[EXT]Public Comment re: Dana Reserve

Katy McGrath <kmcgrath73@gmail.com>

Mon 7/19/2021 9:58 AM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

To whom it may concern:
I have lived in SLO County for over 25 years and I have seen the housing needs here rise year over year. I think the Dana Reserve has been very thoughtful in their approach to building a self-sustaining community in Nipomo. The expansion of a Cuesta Campus and including a daycare shows insight into meeting community needs during development, rather than addressing a problem the development created later. Same with the water plan. It's a bummer that trees will be cut down in order to create the development, but that would be true for nearly anywhere in SLO County. The fact that they set aside a conservation area shows they are at least interested in helping preserve nature, even if not onsite.

[EXT]FW: Support for Dana Reserve

Kenneth Trigueiro <kennetht@pshhc.org>

Mon 7/19/2021 1:31 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>
Cc: Kenneth Trigueiro <kennetht@pshhc.org>

County of San Luis Obispo
Planning Department
EIR and Scoping Process Comments

RE: Support for Dana Reserve Project

Dear Airlin Singewald, Planning Manager
Jennifer Guetschow, Project Manager
Et al,

People's Self-Help Housing is the longest-serving nonprofit affordable housing organization on the Central Coast, founded in San Luis Obispo County in 1970. With a mission of building homes and providing services to strengthen communities and change lives, People's serves low-income households, working families, seniors, veterans, farmworkers, those living with disabilities and the formerly homeless. We provide rental and homeownership opportunities, with over 3000 homes successfully completed, in San Luis Obispo, Santa Barbara, Ventura and Monterey counties, and employing over 200 staff members locally.

We are supportive of processing the Dana Reserve Specific Plan (SP) and General Plan Amendment (GPA) to develop the 288-acre "Cañada Ranch" property in Nipomo. It is our understanding that this well-planned project will provide critically needed housing, affordable to various levels of income earning households, including wage earners and middle income salary earners, both groups of which are sorely undersupplied of affordable options within the County. We believe the housing proposed will be designed to meet a substantial level of the target population. There are limited opportunities to address the County's unincorporated areas needs for housing, in such a comprehensive manner. The proposed housing will serve various income levels, helping achieve the County's economic strategy by housing workers and their families, who represent the workforce across all six of the County's priority business clusters. The project can go a long way toward meeting Regional Housing Needs Assessment targets and meeting the Housing Element goals of the County's General Plan, and is a unique opportunity in that regard.

The community-based Developer's proposed concept meets the most critical needs for the community, for the most challenging categories of households, and provides the opportunity to go beyond the basic requirements for the project to contribute toward affordable housing. We are very pleased to see the collaborative Developer's goal is to make available this valuable resource to address affordable housing needs through a land donation. We have experienced how such donations can leverage substantial more investment into the community and create more units than required, and at much more affordable terms to the future residents. We have studied the proposal and believe it is a well thought out concept and very feasible. Additionally, we support the project's provision of substantial mitigation measures, including approximately 14,000 trees permanently conserved along with 1,500 replanted.

www.pshhc.org
facebook.com/pshhc
twitter.com/pshhc

Kenneth Trigueiro
CEO & President

linkedin.com/company/pshhc
instagram.com/pshhc
www.neighborworks.org

3533 Empleo St
San Luis Obispo, CA 93401
Office (805) 540-2453

[EXT]Dana Reserve comment

Elizabeth Worthen <emt.worthen@gmail.com>

Mon 7/19/2021 1:02 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Hello,

I am writing to communicate my support for this project. I grew up on the central coast and recently moved back. The housing search was very difficult and very expensive for my husband and me. We are excited to raise our family here and are big advocates of projects that bring more affordable housing to the community. We love the dynamic nature of this project and would be thrilled to live in a community like this one. We also love the parks that are planned for this and appreciate the open spaces that will be preserved.

California desperately needs more housing. We would love to have our WA family move here and be near us, but CA is simply too expensive.

We are looking forward to seeing this project come to life.

Sincerely,
Liz Worthen

[EXT]Dana Reserve Project

Megan Sawey <meganesawey@gmail.com>

Mon 7/19/2021 11:08 AM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Good morning!

I'm writing to express my support for the proposed Dana Reserve project. Specifically, I love that it would add more affordable housing to the area. As someone with a large family, I recognize the need for new housing and appreciate this project's potential.

Thank you,

Megan

[EXT]Dana Reserve

michael realteam360.com <michael@realteam360.com>

Mon 7/19/2021 1:35 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

To Whom It May Concern,

I write to you today to voice my vehement support for the proposed Dana Reserve project in Nipomo.

I was fortunate to live in Nipomo during my high school years and hope one day to return to it. I'm a firm believer that everybody should experience everything this city has to offer and what it will become. The people/community of Nipomo is what makes the city so special, more homes and more opportunities to add people to this incredible community is only a positive. As a local realtor, I see daily the struggle it is for so many to purchase a home in our area. The housing crisis in this state and area has to do with simple supply and demand, we need more homes. Home construction in the United States as a whole is down 75% in the last decade and it's down even more on a state and local level. Housing, housing, and more housing…that's how we can solve so many issues on a local and state level. Not to mention the other infrastructure proposed that will benefit the local economy and the fact that there doesn't seem to be any potential traffic issues that will come of the project once completed, this is a win-win for all involved.

I hope that the proposed project is approved for the benefit of the city of Nipomo and the county of San Luis Obispo. Thank you and God Bless!

Sincerely,
Michael Massey
Realtor
RE/MAX Success
1213 Vine Street
Paso Robles, CA
DRE# 02056801
805.305.8383
Michael@realteam360.com
"Inspires others to do what inspires them."

[EXT]Dana Reserve

Rudy Stowell <rudystowell@gmail.com>

Mon 7/19/2021 1:34 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

I am writing in support of the Dana Reserve project. I am a Nipomo resident of over 25 years and my family pioneered the area in the 1870's. I have looked into the impacts of this development as well as the proposed mitigations and find the project to be thoughtfully planned while fulfilling a desperate need for housing. The developer is a local resident which is far preferable to an out-of-area conglomerate looking only to make a quick profit. Please allow this process to proceed without the unreasonable delays that inevitably drive up the final price to homeowners.

Rudy Stowell
Nipomo Resident
Nipomo Business Owner

[EXT]Comments / Questions regarding Dana Reserve Project

rtduchene <rtduchene@gmail.com>

Mon 7/19/2021 12:36 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Hi Jennifer,

Hope you are well. I might be unable to attend today's scoping meeting regarding the Dana Reserve project in Nipomo, but I had a comment and some questions about the project so I thought I would send them through to you in advance.

I moved to SLO county 1.5 years ago and we spent nearly 1 year searching for a home within our budget. The market was so competitive and prices were so high we nearly gave up. I wish this Dana Reserve development had been completed when we were actively searching, as it seems like it will bring a lot of much needed new, affordable homes to the area. Overall, I also love that the current plan has parks and biking / hiking trails, as there are not many great options in South county for this and it will be great to see some in Nipomo that we can use.

I also have a few questions that I was hoping you could address:

- As someone that works from home predominantly, I am curious to know if the house development will have high speed fiber as this is something we can't really find in the area we live?
- I often grocery shop at Vons in Nipomo, but would love to see an alternative option in the area. Are there any plans for another grocer in this development? What other shopping options will there be?
- Can you give me more details on the park(s) and hiking and bike trails?

Thanks,

Ryan DuChene

[EXT]Dana Preserve

Steve Hollister <steve@rockingspade.com>

Mon 7/19/2021 12:40 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Good Afternoon Jennifer,

My name is Steve Hollister, and I have followed with interest the progress of the Dana Preserve project proposed for the Nipomo area. I have been a lifelong resident of the Central Coast, most of it in the South Coast of San Luis Obispo County. I've seen Nipomo grow from a wide spot on the 101, with only Tefft as an artery across the freeway, to a large, unincorporated city housing many commuters up and down the coast. The addition of the Willow road underpass and freeway access was long overdue. My understanding of the Dana Preserve project is that it will connect Pomeroy to Willow, and connect the frontage road by the swap meet to Willow. This is a long overdue improvement to the area, as anyone who drives the 101 or tries to navigate the Tefft and Willow on/off ramps knows.

Additionally, housing continues to be problem for the area in general, and South County in particular. There are few affordable areas that can be built upon, due mainly to land costs. Nipomo is the only place in South County that can generate affordable housing, and I believe that's a part of the Dana Preserve plan. The addition of the additional housing presents plenty of opportunity to attract additional retail business, such as another grocer and other ancillary consumer goods providers. As an avid outdoorsman, the opportunity to have bike paths in that area that connect to other parts of South County are inviting.

I've known Nick Tompkins for some time, and his projects always seem to be well done and meet the needs of the area. He is not a speculative builder, and he seems to have connections to the retail and commercial community that can greatly benefit South County, and San Luis Obispo County in general. The tax dollars alone will undeniably help the County, which is always a need, especially in light of the State neglecting counties financially in the recent past.

I hope you will consider this project on its numerous merits and recommend it to the Supervisors. In my opinion, this is just what Nipomo, South County and San Luis Obispo County need.

Please reach out to me if you have questions or would like clarification on my comments.

Regards,
Steve Hollister

[EXT]Dana Reserve Project- Nipomo

wanda marsalek <wpmars@sbcglobal.net>

Mon 7/19/2021 12:54 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Good Afternoon,

We are writing in support of the proposed Dana Reserve project in Nipomo.

We are both life long residents of Nipomo, and own various properties near the proposed development. As we have watched the area grow, we are disappointed in the infrastructure planning that has occurred previously in Nipomo. We feel the Dana Reserve will address many of the problems we are experiencing.

The traffic situation needs to be addressed. By extending North Frontage Road (as has been long planned) to Willow Road, would greatly help the traffic congestion on Tefft and Mary St. If Pomeroy Road is connected to Willow Road, the traffic thru the neighborhoods around Ten Oaks and Glenhaven would be alleviated. An additional route along the 101 and Tefft Street is much needed!

Growth is unavoidable. Nipomo needs more affordable homes, both for rent and for sale. As the drought continues, this development will help with future water costs by importing water from outside sources, not draining our local aquifer.

The trails, park, and community buildings will be a benefit to all Nipomo residents and will be much appreciated! Hopefully, more commercial services (i.e. grocery, gas, and retail) will be added near the development in the future, to alleviate the problem on Tefft St.

We see many benefits in allowing the Dana Reserve to proceed! We support the Dana Reserve project and are looking forward to a better future for Nipomo!

Sincerely,

Paul and Wanda Marsalek
443 Pioneer Ave
Nipomo
805-710-3328

[EXT]Dana Reserve Project/ traffic impact

larry cools <2coolsaints@att.net>

Tue 7/20/2021 1:21 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Hello Ms Guetchow,
Unfortunately we missed the environmental impact meeting held yesterday. As residents in the neighborhood of this planned development, living on Ten Oaks Way, we would like to voice our support of closing Hetrick Road to through traffic at the locations of Ridge Road and the end of Glenhaven place where it turns into Hetrick. Our neighborhood has been severely impacted by increasingly heavy traffic using our street and Hetrick Rd as a corridor to reach Willow Rd. Correspondence and on site meetings over the years with the county will show the numerous times residents have attempted to have this issue dealt with. The Project, going forward, will only exacerbate this unfortunate situation unless proposed mitigation efforts are enacted.

Respectfully.
Lawrence and Margaret Cools

Margo

[EXT]Dana Reserve

Alison Martinez <ajaymum@charter.net>

Fri 7/23/2021 12:43 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Hi Jennifer
I was unable to log onto the recent scoping meeting regarding the Dana Reserve but believe you are the assigned county planner person. I wanted to write as a neighbor to the project and state that I am in favor of the road closure at the sharp corner on Glenhaven Place and at Ridge Road. Our street have become unsafe due to heavy trucks and increased traffic taking a short cut through our neighborhood
I have also submitted a letter to the Board of Supervisors signed by about 30 neighbors in support of the road closure
Thank you
Alison Martinez

724 Glenhaven Place
Nipomo
805 896-2075

[EXT]CNPS Dana Reserve Scoping Letter

Melissa Mooney <mjmoon@charter.net>

Fri 7/23/2021 11:35 AM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

1 attachments (1 MB)

DanaReserveFinal Scoping7-23-21.pdf;

Good Morning Jennifer -

Attached is the CNPS SLO response to the SLO County Notice of Preparation of EIR for the Dana Reserve project.
Thanks again for your assistance in the review of this project.
If you could kindly acknowledge receipt of this letter, it would be appreciated.

Best -

Melissa

Melissa Mooney
President
California Native Plant Society, San Luis Obispo Chapter
mjmoon@charter.net
cnpsslo.org

[EXT]Dana Reserve Plan Comments

Cindy Jelinek <cjelinek@calpoly.edu>

Sat 7/24/2021 2:59 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

I am writing to voice my objections to the Dana Reserve Project proposed for the north side of our community. My objections fall mainly into 3 categories: water resources (or lack thereof), habitat loss, and traffic. I have lived in Nipomo since 1976 and have seen many changes over the years. Most of them have been positive in the big picture of things, although we are now reaching a tipping point in my opinion.

Water: Nipomo's water comes mainly from groundwater with very little above ground storage. A few years ago, the NCDS contracted with Santa Maria to purchase a portion of their excess allocation from the State Water Project to supplement their water supply. As I understand from the presentation the developers made to the NCSD, their argument to get the NCSD to support their project is that by allowing their 1200 unit development to tap into this resource, it will lower water prices for all of the existing customers of NCSD. This does nothing to address the real issue which is water scarcity.

We are currently experiencing a severe drought. Water tables are dropping in our area. Climate change is creating strange and unpredictable weather patterns as witnessed by the extreme temperatures that occurred from northern California into Canada a few weeks ago. There will be very little snow melt in the fall to replenish reservoirs and rivers that store the water for the State Water Project. Today in the Tribune there was a story about how the State Water Project Commission is voting to curtail all water deliveries to farmers in the San Joaquin Valley in an effort to save endangered fish species. The main reservoirs that feed the project are well below their average for this time of the year. And we have no way of knowing if this drought is going to continue for another year or another five. And this is the water that the Dana Reserve is proposing to use? Will it be there when these houses come on line?

Our water company(Golden State) asked its users to cut back their water consumption by 30% in 2018. The governor has recently asked everyone to voluntarily cut back another 15% because of the severe drought. Are all of us current users of water on the Mesa supposed to cut back and watch our fruit trees and landscaping die so that new houses can be built to suck up more of our limited water resources? It seems foolhardy to consider such a large development when so much is uncertain.

Hab**itat Loss:** This development proposes to eliminate a large swath of oak woodland. I am the president of The Nipomo Native Garden. We are a group of citizens who banded together in the early 90's to adopt 12 acres of parkland from the county and convert it into park that demonstrated the diversity of native plants of the Nipomo Mesa. We have been successful, but it is only 12 acres. Over the years, we have watched as more and more of the native plants have been plowed over for development of housing and farming operations. The corner of Willow Rd and Pomeroy used to be called Ceanothus corner because of the huge grouping of native Ceanothus impressus var. nipomensis that bloomed there every spring along with mazanita and huge oak trees. It was all lost to the expansion of Black Lake Golf Course. Little by little the landscape that sustains wildlife and replenishes the groundwater is being removed and replaced with concrete, roads, and water thirsty plants. The Nipomo Mesa complex of plants is fairly unique and deserves to be preserved and protected.

Tr**affic:** In 1976 when I moved here, there were no traffic lights or stop signs on Tefft St. and traffic on Hwy 101 was non-existent. Now at certain times of the day, it is extremely frustrating. The commercial corridor of Nipomo is mainly on Tefft street from Thompson Ave to a little west of Mary St. This corridor is bisected by the freeway access to Hwy 101. The amount of traffic on this road is staggering at times---when Dana school lets out; when the farm workers from the Mesa and Eucalyptus agricultural enterprises get off from work; when the Swap Meet

happens on weekends. Traffic backs up and it sometimes takes 4 or more light changes to get through the intersection and onto the freeway.

In addition, Hwy 101 also clogs up from Los Berros Rd through the Tefft St exit every afternoon from around 3 to 5 or 6. More commuters feeding into this congested bit of road is going to make things much worse. I remember when the Trilogy Golf Course Community was approved. The planners assured everyone that most of the people that lived there would us Hwy 1 to get to shopping and other amenities, or they would use the commercial district that was planned for the Trilogy community(which never got built) But like the rest of us, they shop at Von's and Miner's Hardware, go to the Post Office on Tefft, and the restaurants and coffee shops right there in that congested corridor. The Dana Reserve people will do the same.

It seems to me that this is the wrong time to approve something as big as this project that will have such a detrimental effect on our small community. We do not know what climate change and weather will be like in the next few years. We already know that we have water scarcity issues and poorly planned traffic management. Habitat loss is also very concerning.

Please consider these issues carefully before you approve this project..

Sincerely,

Cindy Jelinek
480 Calle Cielo
Nipomo

[EXT]Dana Reserve

Lila Henry <henrylila42@yahoo.com>

Sat 7/24/2021 9:43 PM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Dear County Planning Commission,

I am writing to comment on the proposed Dana Reserve. My first concern is about water. Nipomo has two rains all last winter, each was about 3". I know Nipomo gets water from Santa Maria, and has not used all the water it has contracted for. The problem is that all of California is in a drought. Pismo Creek has stopped flowing to the ocean. Creeks all over the state are drying up, so the canal that brings Santa Maria water is also threatened. There is no certainty that Santa Maria will continue to be a source of water.

My second concern is about traffic. Have you ever driven, or tried to drive, downtown Nipomo on a Sunday when the Swap Meet is open? Teft is totally overcrowded. People trying to get onto Teft stop in the middle of their turn frpm traffic stopped ahead of them, thus blocking traffic that should be able to move through the intersection. 1200 houses would be at least another 1200 cars needing to use downtown, either shopping or accessing the 101.

Third, this is not a time when we should be chopping down mature Oak trees. Anywhere. For any reason. Trees are our biggest ally in mitigating or stopping climate change.

Please do not approve this development.

Thank you.

Sincerely,
Lila Henry, resident of Nipomo Mesa

Alexander Glotov Shtein
1344 N. Martel Ave., Unit 302
Los Angeles, CA **90046**

To: **Board of Supervisors of the County of San Luis Obispo**
boardofsups@co.slo.ca.us
Mrs. Lynn Compton, District 4 Supervisor of the County of San Luis Obispo
cmott@co.slo.ca.us, district4@co.slo.ca.us
Mrs. Jennifer Guetschow, Senior Planner of the County of San Luis Obispo
jguetschow@co.slo.ca.us
Department of Planning and Building of the County of San Luis Obispo
planning@co.slo.ca.us
Department of Public Works of the County of San Luis Obispo
publicworks@co.slo.ca.us

July 25, 2021

RE: Neighbor's comments and suggestions regarding Dana Reserve project in Nipomo

I want to provide my opinion on an issue that is far beyond that of a county level due to its massive environmental impact.

INTRODUCTION

Dana Reserve is very ambitious and daring project.
It is understood that the County welcomes a well-known local investor-developer.
It is also clear that the County and all interested organizations expect some protests from the local neighbors regarding such a project.
In all similar situations the protests and arguments are common.
Existing residents usually do not like changes in the environment, either urban or rural, and their protests are most often based on emotions rather than on laws or technical details.
I am an immediate neighbor. My site directly borders on Dana Reserve.
But I am trying to be objective in my analysis of the situation.
Dana's owners purchased their land at the same time I bought my land, **in 2016**.
Below is a photo that I personally took in 2016, when I was exploring the surroundings of the previously unfamiliar town of Nipomo.

This photo of 2016 shows a portion of the site that Dana Reserve operates on today, as well as an advertisement banner for the sale of this site

In the summer of 2016, I called the phone number listed in the banner and was told that the asking price for this 288ac piece of land is $ 6 million (as far as I remember).

After that, I was not interested in this land, since I did not have that kind of money.

I completed my search in 2016 by purchasing 5 acre lot located very close, at 750 Sandydale Drive, Nipomo.

Dana's owners purchased their land for the purpose of development, and I act in the same capacity.

The difference between us is that they are large (they want to build 1200 residences on 288ac parcel) while I am small (I want to subdivide my 5ac parcel into 4 parts and build 4 residences).

The project presentation with conceptual site plan and the specific plans presented by Dana Reserve are not good.
The main mistake that Dana operators made is that they did not set a firm and definite nature-protection task for the plan designers, but, on the contrary, followed the lead of the designers.

I do not understand why we need to kill nature first, and then apply mitigation measures to restore it.
It doesn't work that way.

The result of Dana's approach was that the designers and their customers squeezed everything from the available territory, sticking as many houses there as possible.
At the same time, the licensed design professionals, the NCSD, and the SLO county officials seemed to have conspired with aggressive land developer and forgot that we are talking about construction in a sensitive wild habitat in unique oak forest on a flat area.

Most of the oak trees in California grow in higher elevations (where the air temperature is lower), but here oak trees grow on almost flat terrain and are well visible from busy and popular Freeway 101 (path to the well-known Hearst Castle, Big Sur, Monterrey etc.).

There are very few oak forests in such locations in California.

Even a layman understands that this unique forest cannot be destroyed for any reasons

Oak forest on a vacant land is well visible on a County land use map below.

But, despite obvious abnormality of proposed project, I see a serious discussion of the issue by respectful people for a long time.

I am very bitter and offended to see how local developers whose families have lived in these places for generations are ready to easily destroy the rich nature of the Central Coast at the time when I (an alien in this area) am making great efforts to conserve the nature.

Please see below the pictures of Natural Conservation Areas and related improvements that I have created on my site at 750 Sandydale Dr. in Nipomo.

Nature Conservation Area with Gazebo (wild garden)

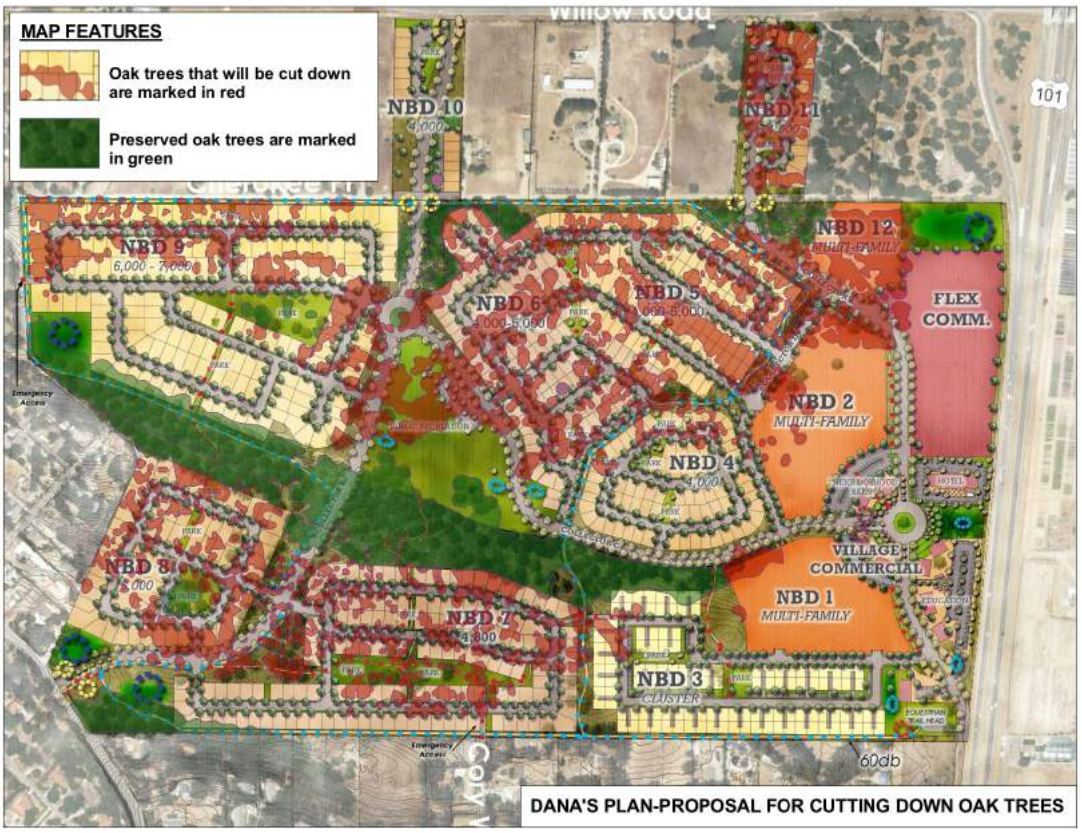
I PROPOSE TO CHANGE CONCEPTUAL SITE PLAN OF DANA RESERVE TO PRESERVE THE UNIQUE OAK FOREST

I am an experienced developer and licensed California general building contractor.
I propose to consider an alternative conceptual plan for my neighbor Dana Reserve.
The alternative informal conceptual plan is my work product. Of course this plan requires elaboration and specification by licensed California civil engineers - planners.
My plan allows the developer to avoid destroying oak trees (excepting very few).
As you can see below, my plan allows for the insertion of building spots into clearings where oak trees do not grow. Local collector roads and residential roadways are also provided in my proposed plan.

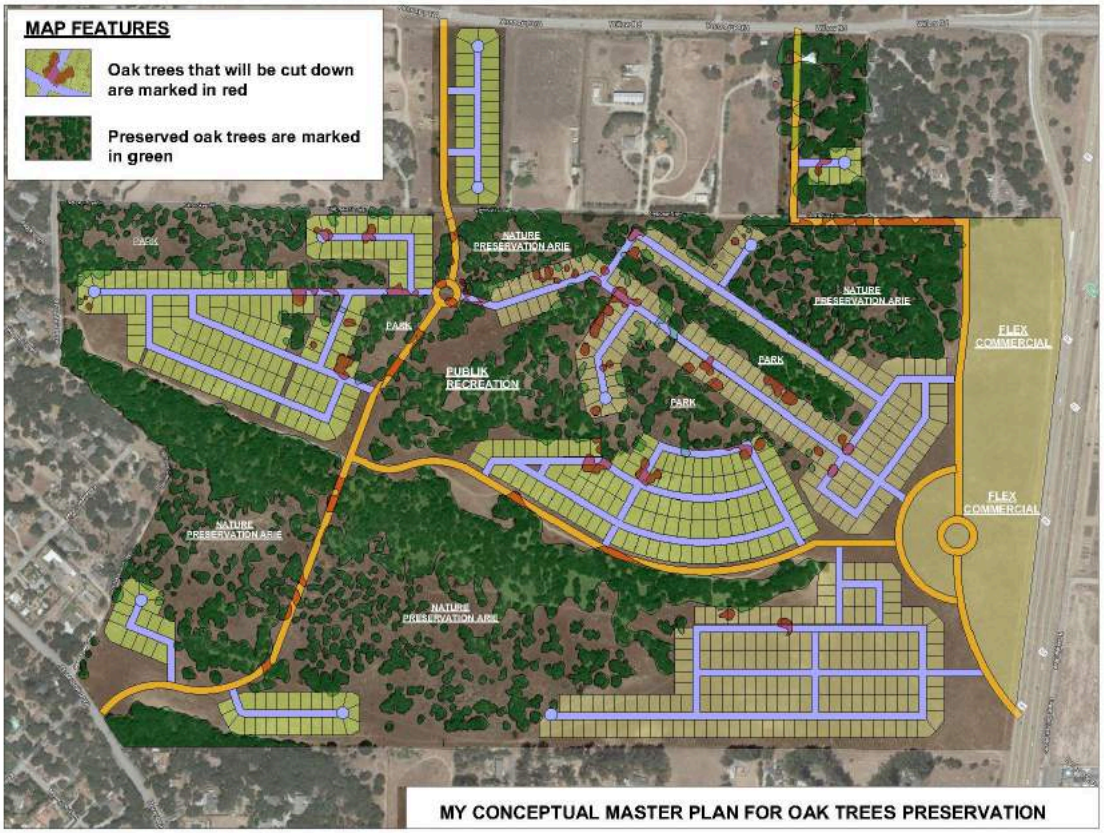
Current woody vegetation on Dana's 288 ac parcel in question

Current Dana's Conceptual Site Plan

Dana's vision of dealing with the existing oak forest: 50% destruction



My vision of dealing with the existing oak forest: 99% preservation



Please compare my conceptual plan with Dana's plan above (which is now being actively discussed by the County and all interested agencies)

The difference is well visible.

Ideally, it would be better to change Dana's plan entirely and divide Dana's plot into 34 parcels of 5 acres each, without changing the zoning, and build up this area with larger size residences (like what I'm building on my parcel now).
Such an approach would make it possible to preserve a unique natural habitat in this place.
Now I understand that, unfortunately, posing the issue like this is like trying to stop the mountain river.
But in any case Dana's current plan is inacceptable.
This is because Mr. Nick Tompkins (Dana's direct beneficiary) did not correctly assign the task to the planning engineers he hired.
It is clear that the planners are not to blame, as they were fulfilling the task assigned to them by their customer (money payer) - to build as many square feet for sale as possible, that is, to maximize the economic profitability of the project.
The plan that I propose is also not perfect.
Unfortunately, it does not provide for the complete preservation of the natural habitat.
But my plan at least saves a unique forest from destruction.
As for the new location for inclusive housing area, such new location is to be determined by the plan designers of Mr. N. Tompkins.

I fully respect Mr. Nick Tompkins as experienced local developer.
Of course I am trying to be loyal to the county where my parcel is located.
In spite of this I want to officially warn all involved parties that I will not allow oak trees to be cut on the scale Mr. Nick Tompkins suggests.
When I invested my money for purchasing and developing my property on 750 Sandydale Dr., Nipomo, in 2016, I was appreciating the amazing oak forest next door.
I did not even imagine that someone would want to destroy this forest, and the county would not put a ban to this.
I knew that California was pushing for oak trees destruction prevention policy.
I reasonably expected the SLO municipal government would never permit the destruction of the unique oak forest on 288 acres – the one of such kind just next to 101 Freeway on Central Coast area.
Now I see that I made a mistake.
Current attempt to destroy the forest in question directly affects not only public interests but also my private legitimate interests, my personal investment and my life's work.
Any attempt to approve Dana Reserve project in the version proposed by Mr. Nick Tompkins (with the massive destruction of oak trees) will face administrative grievances as well as legal action on my part with the claim for damages.
I have a standing in this case, as an immediate neighbor – investor/developer.

Returning to the concept of the impossibility of stopping the river, I propose to seriously consider my alternative plan.

I AM AGAINST THE CONSTRUCTION
OF COMBUSTIBLE WOOD-FRAME VILLAGE NEXT TO ME

Even if the land use concept in Dana's project will be changed and my concept will be adopted (prohibiting the mass destruction of oak trees), the problem still remains.
Both projects - Dana's (with massive destruction of oaks trees and wild habitat) and mine (with the attempt to save oak trees and wild habitat) involve the division of 288ac into small lots and the massive construction of houses in wooded areas.
I don't think we need to remind everyone that California burns every year.
California is not Canada or New York.
God created California so that wild fires are frequent here.
Perhaps people also had a hand in this.
In New York, the Hudson River flows into the ocean in a wide stream all year round.
All rivers in Canada, on the East Coast of the United States and in the Europe pour into the oceans and seas with the same streams.
But in California, rivers are only active in rainy seasons (like in the Middle East).
All rivers in California are dammed, and water is taken to irrigate strawberry, grape, fruit trees, vegetables and even cannabis fields. These are the realities of life.
As a result, most of the rivers in California reach the ocean in small creeks for most of the year (such as in Arroyo Grande or Avila Beach).
Perhaps this is one of the reasons for the frequent wild fires.
Here are the photos that I personally took in the city of Paradise, California which was completely burned out in 2018 (as it turned out, allegedly through the negligent fault of quasi-private utility company PG&E, which suspiciously hastily admitted it's guilt, filed for bankruptcy and settled the case for **13,5 billion**).

These photos were taken personally by me, and not by the reporters of SNN or other news channels.

The photo clearly shows that, although the trees were damaged, they were mostly preserved, while the houses burned down like matches.

You can see the stucco plaster, which has not burned (after all, it is cement), while all the wooden parts of the house (OSB, 2x4 boards) have burned down completely.

Time and experience have shown that wood frame technology is dangerous for California at large. It's time to remember the experience and stop turning a blind eye to the problem.
I firmly oppose to wood frame houses of such kind (see my photos below) being massively built by Dana Reserve in their 288ac piece of land just next to my site.

I do not want a repetition of Paradise's horror (see below) in my city Nipomo, right on the neighboring site.

After all, the city of Nipomo at large and the neighborhood of Dana Reserve (area between Sandydale Drive and Willow Road) in particular, are all planted with old eucalyptus trees, which make Nipomo city environment very similar to those of Paradise and serve as an indisputable factor of fire hazard.
In addition, directly on Dana's site and around there is a massive oak forest (even in Dana's version, it is partially preserved, although it is partially destroyed), and such a forest is very susceptible to wild fires.

Those who today ignore the above fire hazard in the 288ac area of Dana's project in Nipomo in favor of monetary profit, political advantages or any other factors - are criminals.

If my protest will be ignored, if I wouldn't not win the trial due to lock of resources, and if the village of Dana Reserve consisted of combustible houses will be nevertheless built next to my door (as Dana lobbies), then in the event of future fire, fire-related deaths/injuries and/or fire-related property damages in Dana's area or in the area of Villa Victoria Estates (my own subdivision on 750 Sandydale Drive, Nipomo, next to Dana Reserve), **THIS MY LETTER WILL BE PROVIDED AS EVIDENCE IN THE COURT** and **TO THE CRIMINAL INVESTIGATORS OF BUREAU OF INVESTIGATION OF CALIFORNIA DEPARTMENT OF JUSTICE and/or FEDERAL BUREAU OF INVESTIGATION**, and all related Dana's officers/owners/affiliates, all licensed professionals employed by Dana, and all county officials involved in the review/approval process - will be personally liable/responsible for ignoring my warnings and my position.

MY PROPOSAL AS TO CONSTRUCTION METHOD

If Mr. Tompkins needs help in building incombustible homes on Dana's 288ac site, then I can help. I know how to do it.
I built this way in Ukraine and I want to implement this idea in California.

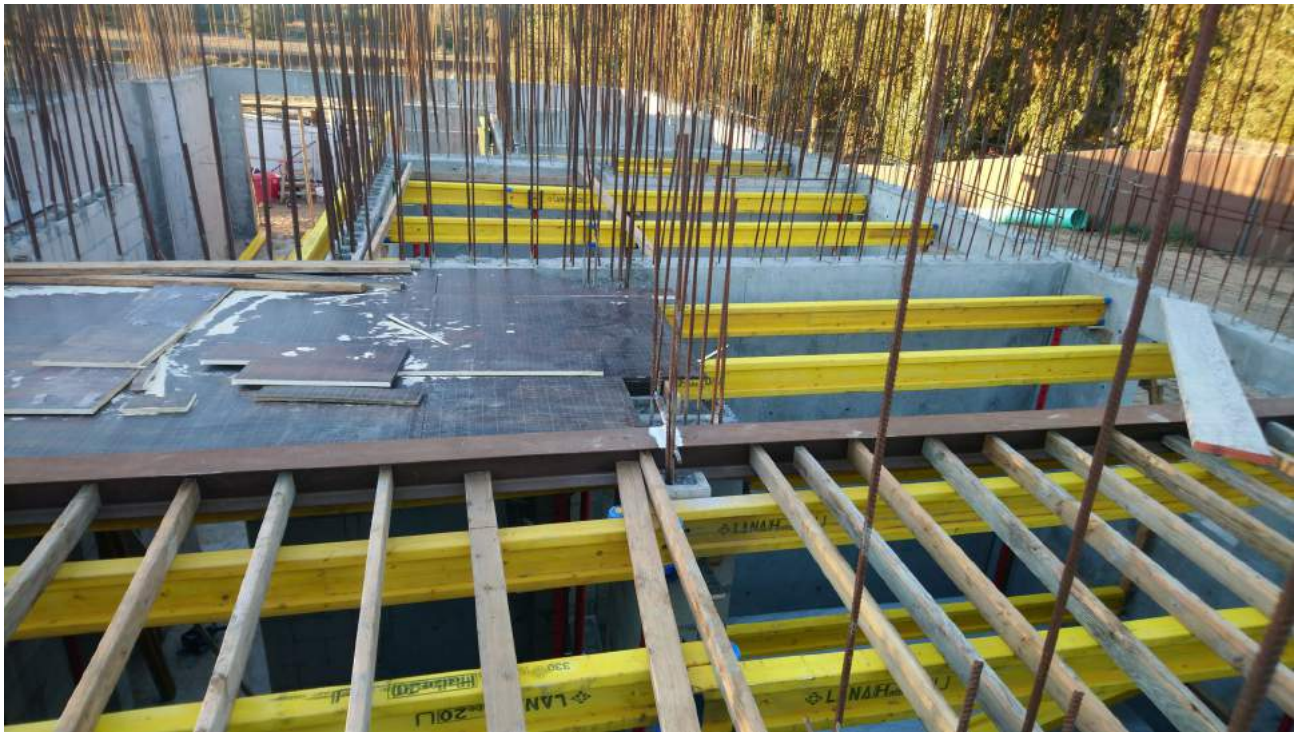
Please compare what Mr. Tompkins is proposing to build on Dana Reserve site with what I am already building on my site, in the territory of future Villa Victoria Estates.

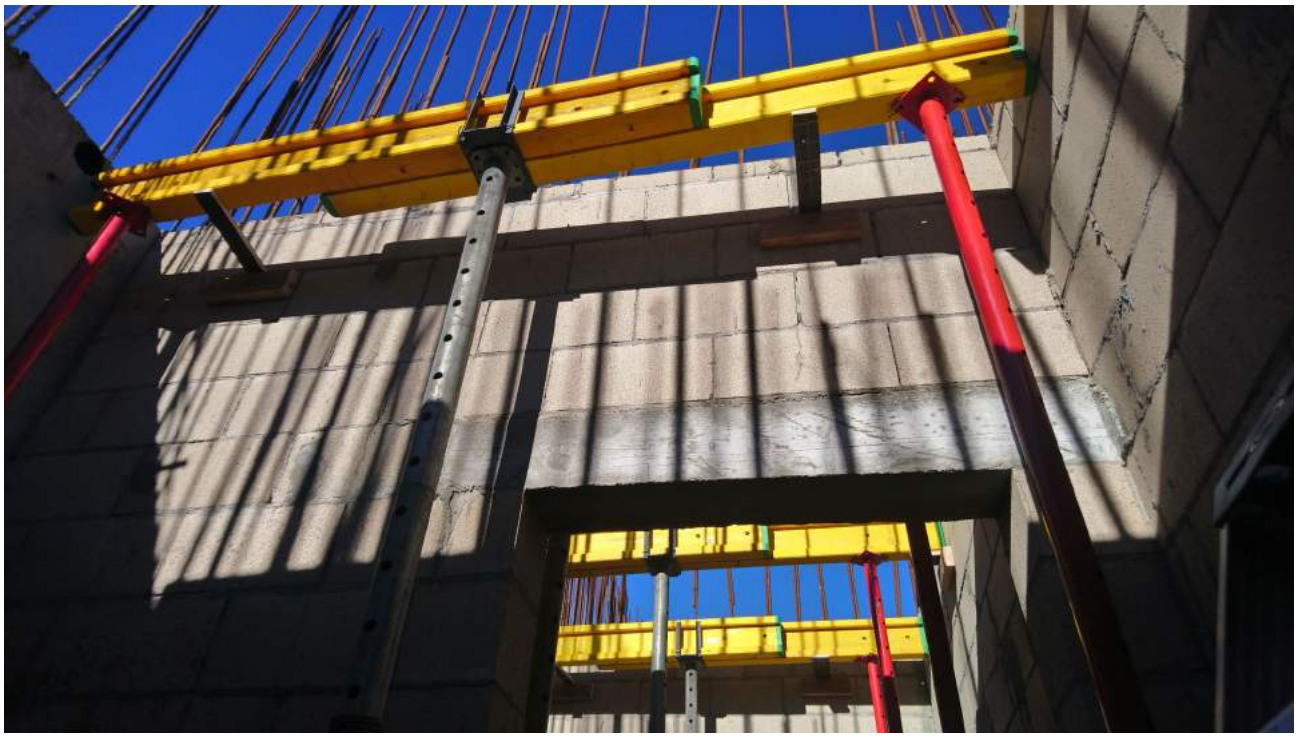
The difference is visible to the naked eye.

Below are some photos of my construction in progress. Only the person who is related to the construction business can understand what I went through.
This kind of building technology is very unusual in the market of single-family homes in the Central Coast area where wood-frame technology is dominates.


PHENEX


CAT






WERNER

The houses in Villa Victoria Estates will be incombustible and non-flammable, and therefore this whole small village consisted of such houses will not sustain combustion.
In the event of a wild fire in such a village (bushes, trees, dry grass) firefighters will be able to focus on saving nature, rather than rescuing cats from burning houses.

The houses in Dana Reserve in the version proposed my Mr. Nick Tompkins will be as combustible as matches. As practice has shown, firefighters are powerless to extinguish the fire in such villages. A village consisting of such plywood houses, surrounded by large eucalyptus and oak trees, has no chance of surviving in the event of a severe wildfire.

The cost of my concrete-frame boxes of houses will be very close to the cost of traditional easily combustible wood-frame houses built of 2x4 boards, plywood and OSB.
In terms of exterior and interior finishing, Mr. Tompkins probably doesn't need my help in this.

I beg you to understand me correctly.
I'm not trying now to promote some new idea at the expense of poor Mr. N. Tompkins.
My idea of building non-combustible houses is old and I have been trying to implement and promote this idea since 2018-2019 (when I initiated my construction and subdivision cases). I knew nothing then about Dana Reserve project.
My words can be confirmed by witnesses from SLO County Department of Planning and Building who know me personally and my projects – **SLO County Planner III Ms. Cindy Chambers** and **SLO County Plans Examiner III Mr. Matt Varvel**.
Please do not hesitate to ask the above mentioned persons for the details of my projects, the start time of these projects, and my state of mind as to construction technology.
After that, you will see that I started promoting the idea of non-combustible construction long before the public and I have learned about Mr. N. Tompkins's plans to build huge quantity of combustible plywood houses in the middle of oak forest in Nipomo (including multifamily and "cluster" homes of extremely high combustibility).

So, as General Contractor, it will be my pleasure to help Mr. Nick Tompkins to build his dream village on his 288 acres that he says belonged to his ancestors 100 years ago.
Of course, the village in my design will be built without destroying oak trees and will only consist of non-combustible concrete-frame houses with flat roofs (roofs are built of reinforced concrete without wood trusses, wood rafters, wood posts etc.).

I am ready to be responsible for building concrete frames of all houses/buildings with concrete slabs/ceilings and leave to Mr. Nick Tompkins freedom of making design decisions (this freedom will be limited only by the structural requirements for load-bearing members, which in concrete-frame construction differ from wood-frame construction, but I do not think that when building houses of small square-footage it will create a problem).

However, I do not impose my service.
If Mr. Tompkins or his investors or the County of San Luis Obispo for some reason do not want to involve me in such a project, the project could be done without my participation.
But my requirements, as the owner of the neighboring plot, remain unchanged: i**t is forbidden to destroy oak trees in the neighborhood of future Villa Victoria Estates** and **it is forbidden to build new village consisted of combustible materials, such as so popular plywood, OSB, 4x4 boards, plastic water-barrier films in this high fire hazard area.**

THE ISSUE WITH NEW TRANSPORTATION ROUTS AND THEIR POTENTIALLY NEGATIVE IMPACT ON TRAFFIC IN THE EXISTING COMMUNITY

I received a letter from Jennifer Guetschow, Senior Planner of San Luis Obispo County, inviting me to provide my comments on Dana Reserve project by July 25, 2021.

In the course of preparing my comments, I studied the available materials associated with the project, including Dana Reserve initial presentation of 2020, Dana Reserve Specific Plan (version of June 2020), Dana Reserve Specific Plan (version of April 2021), Preliminary Initial Study – Environmental Checklist of Department of Planning and Building of San Luis Obispo County of June 2021).

I noticed gradual but significant changes in the proposed land use for a future project.
In particular, in earlier presentation versions dated June 2020 and April 2021, there were no signs of joining the piece of land at the corner of North Frontage Road and Sandydale Drive in Nipomo (APN 091-325-022) to the Dana Reserve project, as can be seen on the Specific Plans produced by Dana Reserve on June 2020 and April 2021.

Much to my surprise, in a document prepared by the San Luis Obispo County under the title “Preliminary Initial Study – Environmental Checklist” dated June 25, 2021, I discovered that this 5ac piece of land at the bottom of Sandydale Drive (APN 091-325-022) already became a part of the Dana Reserve project.

Please compare the three plans below (06/2020, 04/2021 and 06/2021) and pay attention to the blue arrows


June 2020
Cherokee Pl
Sandydale Dr
RSF-1
RSF-2
RMF
FC/LI
REC
OS
VC
BASIN


April 2021
Cherokee Pl
Sandydale Dr
RR
DR-SF1
DR-SF2
DR-MF
DR-FC
DR-REC
DR-OS
DR-VC
BASIN


June 2021
RR
DR-SF1
DR-SF2
DR-MF
DR-FC
DR-REC
DR-OS
DR-VC
BASIN
Collector A
Collector B
Collector C
Collector D

I have not found an explanation for such documentary evolution (**marking 5ac parcel on Sandydale Drive, APN 091-325-022, a part of Dana Reserve project**) in official documents.
Of course, I understand the line of thought of Mr. N. Tompkins, his engineers and the County planners in this matter - they want to provide future residents of Dana Reserve with direct and easy access to the center of Nipomo where supermarkets, pharmacies, restaurants etc. are located.
The easiest way to organize such an easy access is through North Frontage Road (where large trailer park and crowdy flea market are already situated).
I want to emphasize that directing busy Dana's traffic directly to intersection of North Frontage Road and Sandydale Drive will make the newly reconstructed three-way intersection on Sandydale Dive and North Frontage Road almost impassable on weekends when the famous Nipomo Flea Market on North Frontage Road is open.

Traffic from Dana Reserve and Trailer Hitch RV will meet on the narrow North Frontage Road, blocking the exit from Sandydale Drive which is unacceptable.
North Frontage Road and lower part of Sandydale Drive are already often blocked by the maneuvers of large trailers belonging to a recreation trailer rental business located on this street called Trailer Hitch RV.
This is well illustrated by the photographs I have taken.

This issue requires close attention, separate discussion and analysis, and obligatory widening of the North Frontage Road using the territory of businesses along the way (if it would be possible to agree with Trailer Hitch, Flea Market and other businesses in this regard). **WITHOUT SUCH ROAD WIDENING, DANA'S ROAD CONNECTION TO INTERSECTION OF NORTH FRONTAGE ROAD AND SANDYDALE DRIVE - IS INAPPROPRIATE, WILL MEET RESISTANCE, AND WILL END IN A LEGAL ACTION.**

REASONS OF MY SKEPTICISM ABOUT JUDGEMENTS OF THE COUNTY REGARDING DANA RESERVE DEVELOPMENT PROJECT

Usually ordinary citizens, including small businessmen, do not get involved in politics and trust their governments.
And I am not an exception.
Unfortunately, practice has shown that municipal governments are often corrupt and fall under the control of local commercial groups, most often large local building developers.

I differ from ordinary small construction businessmen in that I have a law degree, law enforcement background, and an exceptional ability to investigate and analyze the events.

I have been visiting the County of San Luis Obispo since August 2016 (while conducting my due diligence check before buying property, submitting many applications, coordinating many issues on my construction and subdivision projects, communicating with various inspectors and planners of the County, obtaining various permits and correcting deficiencies), but until July 2021 I have not conducted any private investigations regarding my county.

Over the past 5 years, I was only interested in my small business and my projects on 750 Sandydale Dr. in Nipomo and was not at all interested in gossip and discrediting information about the activities of local officials.

But now everything has changed.

I studied the presentation and official documents regarding the Dana Reserve project (DRSP) drawn up by County officials, and found the following outwardly correct phrases there:

> “The DRSP provides a vision and would guide development of “The Dana Reserve” by defining land uses and development standards, circulation, parks and trails, and infrastructure for the future residential, commercial, and open space land uses”
> “The DRSP also provides a phasing/implementation plan and public facility financing options to accommodate this future development”
> “Provide a mix of land uses that provides a range of amenities accessible to residents and community members. To respect Old Town Nipomo, the small, neighborhood-oriented village commercial area has been designed to complement, rather than compete with this area”
> “Provide a public neighborhood park, pocket parks, and open space areas within each residential neighborhood, linking the neighborhoods together through a network of trails and open spaces”
> “Incorporate the rural history of the community through architectural design”
> “Provide a diversity of housing types and opportunities for home ownership and apartments, including affordable homes consistent with the goals and policies of the Housing Element of the General Plan, the County’s Inclusionary Housing Ordinance, and regional housing needs”
> “Create new employment and job training opportunities for the community and the broader South San Luis Obispo County area”
> “Integrate a network of walking, bicycling, and equestrian facilities to connect on-site residential neighborhoods and the broader community”
> “Maintain the large, centrally located oak woodland area as a site feature. Minimize impacts to

special status plants and animals on-site”
“Meet the Building Code requirements for energy efficiencies and water savings”
“San Luis Obispo County Board of Supervisors, on January 26, 2021, entered into an MOU with the applicant that states the project would have the following benefits to the County:
1. Implementing the County’s stated land use goals

2. Dedication of an Open Space easement, community park, and trail system

3. Providing the County with anticipated increased sale tax, property tax, and transient occupancy tax revenues

4. Providing for affordable housing in furtherance of the County’s Housing Element and inclusionary housing goals and to assist in meeting the County’s Regional Housing Needs Allocation

5. Providing a portion of the site to be developed as a business park, commercial area, or such related uses, in support of the County’s further economic development

6. Permanent conservation of 388 acres of oak woodlands or similar habitat located off-site”

“In addition to new interior roads, the DRSP identifies a bicycle network, an equestrian network, a pedestrian network, and public transit areas”
“The development of the specific plan area has been designed to preserve the dense oak woodlands in the center of the property along with several dense clusters of historic oak trees”
“On-site mitigation will include planting up to 1,500 oak trees to provide approximately 24 acres of oak canopy in open space areas and as street trees. Additionally, this project will provide funds for off-site tree planting in the Nipomo area”

The above phrases are written in the official professional language that not every average person will understand.
But I understood everything, although English is not my native language.
The above phrases are full of optimism towards Dana Reserve project and it is obvious to me that the respected County staff has little or no objection to this project.
It would seem that society should trust the public servants from the county who serve the community without any personal interest.
But in the course of preparing my comments, I studied the available information about the SLO County leadership and was upset.
It turns out that in the period from August 2016 to April 2020 (that is, during the period when I was actively working on my construction and land subdivision projects), strange things were going on in the County of San Luis Obispo.
First of all, I drew attention to an archival article in the Cal Coast Times on **August 21, 2018,** which states that the San Luis Obispo Board of Supervisors took the following actions **back in 2017**: "directed county staff to identify large tracts of land could be rezoned for housing developments", "instructed staffers to consider factors including: proximity to job centers; availability of water, wastewater and road infrastructure and police and fire services; resource availability, particularly water supply and consumer preferences". At the time of the article's release, in **August 2018**, the following actions took place: “county staffers crafted a list of eight potential locations for new development which will be presented to the board of supervisors on Tuesday”, "the eight locations under consideration for new housing development” were included **North Nipomo**.
Please see the Cal Coast Times article below.

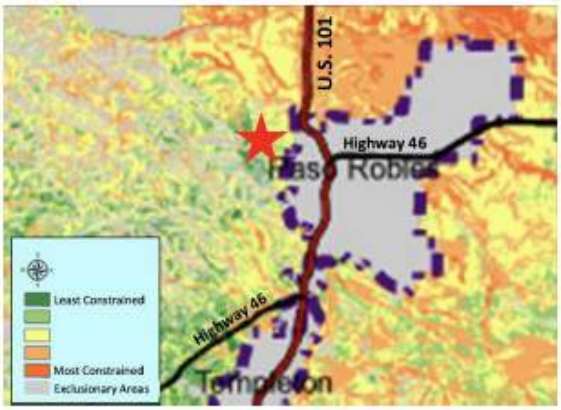
Cal Coast Times *Cal Coast Times*

Reporting on the Central Coast's most significant issues

News Briefs Special Reports Opinion Community

SLO County identifies eight rural areas for new housing

August 21, 2018



The San Luis Obispo County Board of Supervisors will discuss Tuesday the possibility of new housing being built in eight unincorporated areas of the county ranging from west Paso Robles to southeast Nipomo.

Last year, the board of supervisors directed county staff to identify large tracts of land that could be rezoned for housing developments. The board instructed staffers to consider factors including: proximity to job centers and services; availability of water, wastewater and road infrastructure and police and fire services; resource availability, particularly water supply; and consumer preferences.

County staffers crafted a list of eight potential locations for new development, which will be presented to the board of supervisors on Tuesday. Some of the areas are considered potential locations for annexation into cities, such as San Luis Obispo and Paso Robles.

The eight locations under consideration for new housing development are:

West Paso Robles

West Templeton

South Atascadero

Pozo Road area

Los Osos Valley Road area (near the city of SLO)

Edna Valley area

South Arroyo Grande and north Nipomo

Southeast Nipomo

Additionally, county officials are considering possible new housing developments in San Miguel and Shandon. Both San Miguel and Shandon recently updated their community plans, allowing for new development within planned expansion areas.

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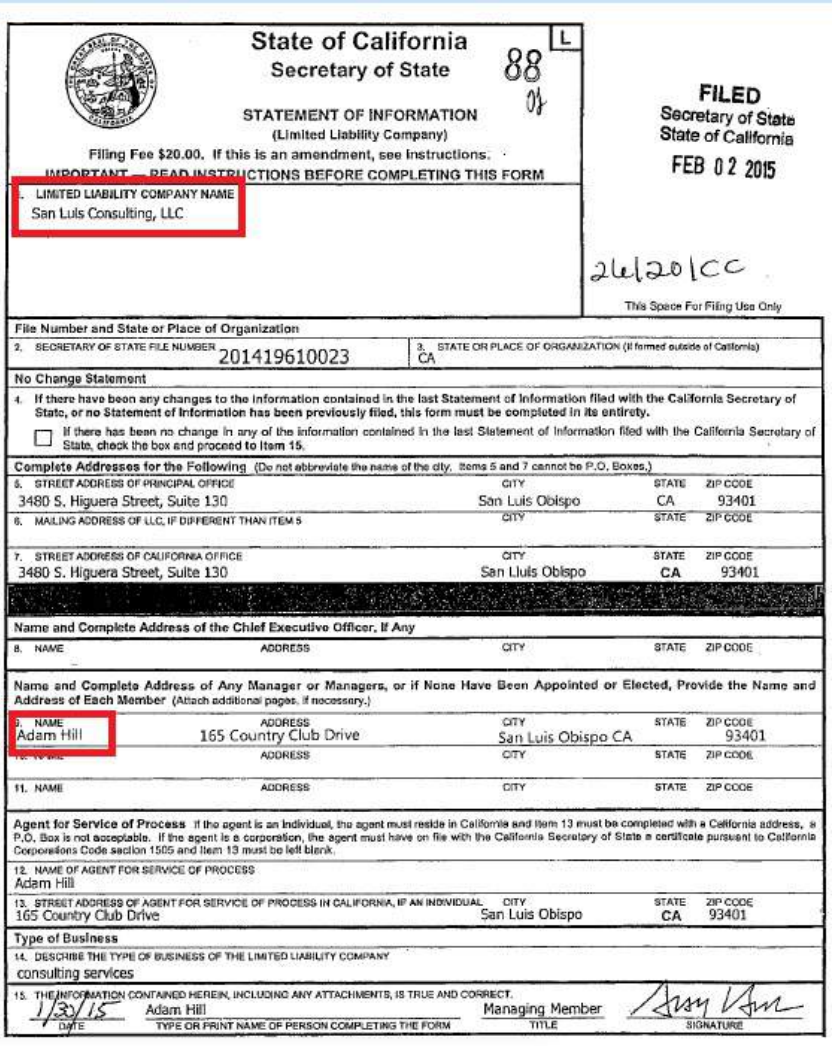
At 2017-2018, none of the uninitiated persons (including myself) heard about Dana Reserve project in Nipomo.

Perhaps I would now believe in a coincidence in which Mr. Nick Tompkins in 2017-2018 knew nothing about the County's decision to allow large-scale housing development in North Nipomo. But I am confused by the fact that in North Nipomo there is only one large housing development project, namely already widely known to all as Dana Reserve.

As for **Mr. Nick Tomkins**, he bought the land in question in Nipomo **in 2016**.

That is, **in 2017-2018** (when "county staffers" crafted "potential locations", including the location in North Nipomo), **Mr. Nick Tompkins** already controlled the parcel in question in North Nipomo.

After a short research, I learned that the **Vice Chairman of the Board of Supervisors of the County of San Luis Obispo in 2016-2017** was **Mr. Adam Hill** (who first was elected as 3-d District Supervisor in 2008). In the years **2018-2020 Mr. Adam Hill** served as the **Chairman of the Board of Supervisors of the County** (that is, he was actually the first person in my County, in the territory of which I decided to settle and invest all my money).
This period of **2016-2020** coincided with my work on the projects for the construction of a house and land division at **750 Sandydale Drive in Nipomo**.
I want to repeatedly emphasize: I have invested all my money in these projects.
I am always trying not to believe in gossip, not to believe in newspaper publications and to double-check all information personally.
Unfortunately, my personal check showed that **Mr. Adam Hill** has done things that are incompatible with being the second and the first ranking official in the County.
I was amazed that the information published by the enemies of Mr. Adam Hill was confirmed.
I personally checked the website of the California Secretary of State and personally verified that **Mr. Adam Hill** was a **Manager** at the privately-owned **San Luis Consulting LLC**
(see printout of Statement of Information of this legal entity below)



State of California
Secretary of State

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STATEMENT OF INFORMATION
(Limited Liability Company)

Filing Fee $20.00. If this is an amendment, see Instructions.

IMPORTANT — READ INSTRUCTIONS BEFORE COMPLETING THIS FORM

FILED
Secretary of State
State of California
FEB 02 2015

1. LIMITED LIABILITY COMPANY NAME
San Luis Consulting, LLC

26|2016CC

This Space For Filing Use Only

File Number and State or Place of Organization

2. SECRETARY OF STATE FILE NUMBER: 201419610023
3. STATE OR PLACE OF ORGANIZATION (If formed outside of California): CA

No Change Statement

4. If there have been any changes to the information contained in the last Statement of Information filed with the California Secretary of State, or no Statement of Information has been previously filed, this form must be completed in its entirety.
☐ If there has been no change in any of the information contained in the last Statement of Information filed with the California Secretary of State, check the box and proceed to Item 15.

Complete Addresses for the Following (Do not abbreviate the name of the city. Items 5 and 7 cannot be P.O. Boxes.)

	ADDRESS	CITY	STATE	ZIP CODE
5. STREET ADDRESS OF PRINCIPAL OFFICE	3480 S. Higuera Street, Suite 130	San Luis Obispo	CA	93401
6. MAILING ADDRESS OF LLC, IF DIFFERENT THAN ITEM 5				
7. STREET ADDRESS OF CALIFORNIA OFFICE	3480 S. Higuera Street, Suite 130	San Luis Obispo	CA	93401

Name and Complete Address of the Chief Executive Officer, If Any

	ADDRESS	CITY	STATE	ZIP CODE
8. NAME				

Name and Complete Address of Any Manager or Managers, or if None Have Been Appointed or Elected, Provide the Name and Address of Each Member (Attach additional pages, if necessary.)

	ADDRESS	CITY	STATE	ZIP CODE
9. NAME: Adam Hill	165 Country Club Drive	San Luis Obispo CA		93401
10. [illegible]	ADDRESS	CITY	STATE	ZIP CODE
11. NAME	ADDRESS	CITY	STATE	ZIP CODE

Agent for Service of Process If the agent is an individual, the agent must reside in California and Item 13 must be completed with a California address, a P.O. Box is not acceptable. If the agent is a corporation, the agent must have on file with the California Secretary of State a certificate pursuant to California Corporations Code section 1505 and Item 13 must be left blank.

12. NAME OF AGENT FOR SERVICE OF PROCESS
Adam Hill

	CITY	STATE	ZIP CODE
13. STREET ADDRESS OF AGENT FOR SERVICE OF PROCESS IN CALIFORNIA, IF AN INDIVIDUAL: 165 Country Club Drive	San Luis Obispo	CA	93401

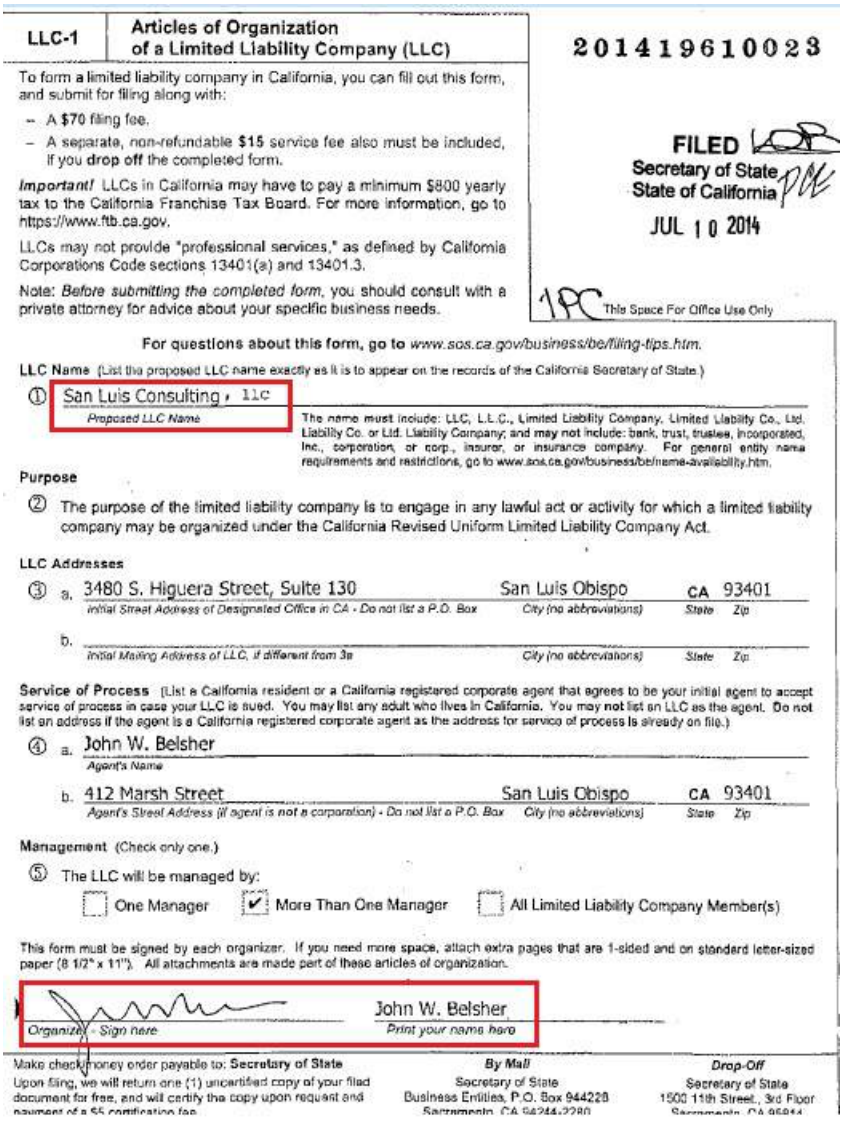
Type of Business

14. DESCRIBE THE TYPE OF BUSINESS OF THE LIMITED LIABILITY COMPANY
consulting services

15. THE INFORMATION CONTAINED HEREIN, INCLUDING ANY ATTACHMENTS, IS TRUE AND CORRECT.

1/30/15	Adam Hill	Managing Member	[signature]
DATE	TYPE OR PRINT NAME OF PERSON COMPLETING THE FORM	TITLE	SIGNATURE

This company in question was created by **Mr. John Belsher** from San Luis Obispo (see printout of Articles of Organization of this legal entity below)



LLC-1 **Articles of Organization of a Limited Liability Company (LLC)**

201419610023

To form a limited liability company in California, you can fill out this form, and submit for filing along with:

- A $70 filing fee.
- A separate, non-refundable $15 service fee also must be included, if you drop off the completed form.

Important! LLCs in California may have to pay a minimum $800 yearly tax to the California Franchise Tax Board. For more information, go to https://www.ftb.ca.gov.

LLCs may not provide "professional services," as defined by California Corporations Code sections 13401(a) and 13401.3.

Note: *Before submitting the completed form*, you should consult with a private attorney for advice about your specific business needs.

FILED
Secretary of State
State of California
JUL 10 2014

This Space For Office Use Only

For questions about this form, go to *www.sos.ca.gov/business/be/filing-tips.htm.*

LLC Name (List the proposed LLC name exactly as it is to appear on the records of the California Secretary of State.)

① San Luis Consulting, LLC
Proposed LLC Name

The name must include: LLC, L.L.C., Limited Liability Company, Limited Liability Co., Ltd. Liability Co. or Ltd. Liability Company; and may not include: bank, trust, trustee, incorporated, Inc., corporation, or corp., insurer, or insurance company. For general entity name requirements and restrictions, go to www.sos.ca.gov/business/be/name-availability.htm.

Purpose

② The purpose of the limited liability company is to engage in any lawful act or activity for which a limited liability company may be organized under the California Revised Uniform Limited Liability Company Act.

LLC Addresses

③ a. 3480 S. Higuera Street, Suite 130 — San Luis Obispo — CA — 93401
Initial Street Address of Designated Office in CA - Do not list a P.O. Box — *City (no abbreviations)* — *State* — *Zip*

b. _____
Initial Mailing Address of LLC, if different from 3a — *City (no abbreviations)* — *State* — *Zip*

Service of Process (List a California resident or a California registered corporate agent that agrees to be your initial agent to accept service of process in case your LLC is sued. You may list any adult who lives in California. You may **not** list an LLC as the agent. Do not list an address if the agent is a California registered corporate agent as the address for service of process is already on file.)

④ a. John W. Belsher
Agent's Name

b. 412 Marsh Street — San Luis Obispo — CA — 93401
Agent's Street Address (if agent is not a corporation) - Do not list a P.O. Box — *City (no abbreviations)* — *State* — *Zip*

Management (Check only one.)

⑤ The LLC will be managed by:

☐ One Manager ☑ More Than One Manager ☐ All Limited Liability Company Member(s)

This form must be signed by each organizer. If you need more space, attach extra pages that are 1-sided and on standard letter-sized paper (8 1/2" x 11"). All attachments are made part of these articles of organization.

Organizer - Sign here — John W. Belsher *Print your name here*

Make check/money order payable to: **Secretary of State**
Upon filing, we will return one (1) uncertified copy of your filed document for free, and will certify the copy upon request and payment of a $5 certification fee.

By Mail
Secretary of State
Business Entities, P.O. Box 944228
Sacramento, CA 94244-2280

Drop-Off
Secretary of State
1500 11th Street, 3rd Floor
Sacramento, CA 95814

Mr. John Belsher is a lawyer who specializes in land use, construction, water resources in San Luis Obispo County.

In addition, attorney **Mr. John Belsher**, together with his partner **M-r Ryan Petetit**, was himself a construction developer running construction projects in downtown of the city of San Luis Obispo.

The County Supervisor (i.e. the top ranking official of the County) should not work as a manager in the company and receive money from the company which belongs to the lawyer who handles legal matters in the County and who itself is a developer whose business is heavily depends on County's review, permits and supervision.

This is an axiom. Period.

Such affiliation is clearly indicative of corruption.

The affiliation and friendship of Mr. **Adam Hill** with Mr. **John Belsher** and published joint family photos with their wives were touching.
A similar friendship and cooperation was observed between **Mr. Adam Hill** and another major local developer, **Mr. Gary Grossman** of Pismo Beach.
And here I had to observe touching joint photographs.
As for the developer **Mr. Nick Tompkins** (operator of my neighbor Dana Reserve), there are no joint photos of him with **Mr. Adam Hill**.

But there is strong evidence that all three of the above developers, including my neighbor **Mr. Nick Tompkins**, were donors to **Mr. Adam Hill's** election campaigns.

The above facts in themselves are not evidence of crimes.
But these facts themselves raise ethical and conflict of interest issues.
I cannot ignore these issues as well as the louder events that happened in 2020.
I mean the well-known searches that the FBI conducted in the administrative building of County of San Luis Obispo and in the office of Mr. Adam Hill charging Mr. Adam Hill in alleged illegal lobbying in favor of cannabis growers.
Such scandals are rare in the United States.
Unfortunately, such a scandal happened in the County, on whose decisions my investment depends, and therefore my well-being and my whole life.

The culmination of the County scandal was the disappearance of Mr. Adam Hill, his attempted suicide, drug overdose, pronounces mental illness, and ultimately his sad suicide death in August 2020.

I do not want to comment on the above facts too deeply, because it is not customary to speak badly about the dead.
I don't want to be a judge for Mr. Adam Hill.
I want his soul to rest in peace.

But after all of the above, I DON'T HAVE to believe everything the County officials say.
The image of the County was significantly tarnished by the above events, and it will take a long time to restore this image.
I do not have to believe that the developer Mr. Nick Tompkins in 2018 (when the Chairman of Supervisors Mr. Adam Hill was in command of the County of San Luis Obispo) did not discuss Dana Reserve project in Nipomo with County officials informally.
But I have not seen the official application or presentation of Dana Reserve in 2018. (when the zoning was changed in North Nipomo).
In 2018 - 2019, I did not know anything about the Dana Reserve project, although I am directly interested person (the neighbor) that spent big amount of money on own projects in the immediate vicinity of Dana Reserve during these years.
I see this as a hidden violation of the principles of publicity, openness and disclosure.

I suspect the illegal lobbying by the County of private interests under the guise of concern for society.
After perceiving and analyzing all of the above information on unusual events in the County, it is hard for me to take seriously the seemingly correct and clever phrases that make up the report drawn up by SLO County Senior Planner Mrs. Jennifer Guetschow in the document titled “Preliminary Initial Study – Environmental Checklist of Department of Planning and Building of San Luis Obispo County” regarding Dana Reserve development project.
The combination of experience as a criminal investigator and a land developer allows me to see things differently from the average citizen.
I see what the average citizen cannot see.
In my opinion, the obvious support by the County of a project that is clearly killing nature may indicate the illegal motives of those County officials who instruct ordinary County employees to turn a blind eye to obvious violations of environmental laws by the developer.

As immediate neighbor and California citizen I cannot voluntarily make my fate dependent on presumably illegal actions of third parties.

Based on the above, I officially request:

1. Reconsider the complacent attitude towards the Dana Reserve project and apply necessary caution and due diligence.
2. Refrain from any relationship with Mr. Nick Tompkins "under the table", non-publicly disclosed, in a manner not prescribed by law; replace all County employees involved in Dana Reserve project who previously worked on this project and negotiated with Mr. Nick Tompkins or his agents (lawyers, architects, engineers, etc.) on issues related to Dana Reserve.
3. Do not allow Dana Reserve to cut oak trees in the quantity they want. Take as a basis my conceptual site plan of Dana Reserve (inserted above in this letter), which does not provide for the massive destruction of the oak forest with the exception of a few trees.
4. Do not allow Dana Reserve to build a village in Nipomo from combustible materials (plywood, OSB, 2x4 boards, plastic waterproof films etc.). Suggest to Dana Reserve LLC and Mr. N. Tompkins to build all structures in Dana Reserve using concrete-frame technology, with flat roofs made of reinforced concrete, **without roof trusses/rafters/posts/boards**, with the purpose to eliminate the fire hazard (if necessary, I can help with this, as a building contractor, but my participation here is optional).
5. In the event that Dana Reserve plans to build a road connection to the center of Nipomo by virtue of direct insertion of new road into the intersection of North Frontage Road and Sandydale Drive, then I request that Dana Reserve be ordered to negotiate with the respective land owners and users, and to widen the section of

North Frontage Road from Sandydale Drive to Mary Avenue as well as to widen the section of Mary Avenue to Tefft Street in order to provide the necessary traffic efficiency and prevent traffic collapse in the area where my home is under construction and my Villa Victoria Estates is under development.
Otherwise the above road connection should not be permitted.

I ask everyone not to perceive me as an enemy. I am not to blame for this situation.
I didn't come up with the idea of destroying the well visible ancient oak forest in Nipomo (where thousands of local residents and tens of millions of 101 Freeway travelers enjoy it) in exchange for a cunning "mitigation-dedication" of the forest in a remote, physically inaccessible area, in a place where people do not live/travel and will never live/travel.
It is necessary now to find a solution that will not be harmful to society and neighbors.
I am ready to meet and confer with all interested persons and personally defend my position.
I will be grateful for a quick response to my letter in writing (preferably by email).
Please note that this letter and the answers to it can be used as evidence in future legal proceedings.

Sincerely yours

Alexander Glotov Shtein

Alexander Glotov Shtein L L.M.

Naturalized U.S. citizen of Ukrainian origin
Master of Laws, Transnational Business Practice (Graduate of State University School of Law, Kyiv, Ukrainian Republic, former Soviet Union, and McGeorge School of Law, Sacramento, California)
At past the Criminal investigator in the former Soviet Union
Owner of parcel of land located at 750 Sandydale Drive, Nipomo, CA since 2016
Owner of Federal Trademark "Wholecrete" (USPTO registry # 5747001)
Licensed California building contractor (contractor's license # 1037879)
President of Prime Build Co., Inc. (contractor's license # 1038968)
Developer and operator of 4-parts subdivision project **Villa Victoria Estate** at 750 Sandydale Drive, Nipomo, CA (Parcel Map # SUB2019-00080)
Builder-contractor of concrete-frame single family home of 7000 sq.ft. in 1ac part (future separate parcel upon subdivision and creation of Villa Victoria Estates) at 750 Sandydale Drive, Nipomo, CA (Construction Permit # PMTR2019-00412)
Neurologically disabled person with Progressive Motor Neuron Disease (neuro-muscular atrophy that limits flexion movements of hands and shins and is the cause of hand weakness, bilateral foot drop and movement disorder)

Current address for correspondence:
1344 N. Martel Ave., Unit 302, Los Angeles, CA 90046
Email: alexxvita@gmail.com

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Current address for correspondence:
1344 N. Martel Ave., Unit 302, Los Angeles, CA 90046
Email: alexxvita@gmail.com

[EXT]Re: Dana Reserve

AlexxVita AlexxVita <alexxvita@gmail.com>

Mon 7/26/2021 8:30 AM

To: Jennifer Guetschow <jGuetschow@co.slo.ca.us>

Dear Jenifer
I just sent my comments on Dana Reserve to everybody cc to you.
I apologize for some harshness, but I see no other way to save the oak trees in danger.
Please don't take my letter personally.
I understand that you are a soldier, not a general.
After all, there is a way to avoid complete deforestation on 50-60% of Dana's land - to apply my new conceptual plan.
I am seriously preparing for legal action.
Sorry.

I have sent several versions of my letter, including one with the wrong address and an unsigned one.
The last option, marked with @@, is correct.
I am sending it now directly to your email.
Please attach this my letter to Dana's file.
I would be grateful for the County's prompt reply to my letter.
Best Regards,
Alexander

@@ A.Glotov's - Comments on Dana Reserve projec...

On Tue, Mar 30, 2021 at 12:50 AM AlexxVita AlexxVita <alexxvita@gmail.com> wrote:

> To: Department of Planning and Building of the County of San Luis Obispo
> Copy to: Supervisor Compton
>
> Hello Jenifer
> Many thanks for the quick reply and frank answers.
> Noted.
> Tank you very much for adding me to the Interested Parties List maintained by the County.
> I am a directly interested party (as immediate neighbor - developer of Villa Victoria Estates at 750 Sandydale Dr., Nipomo)), and I would very appreciate proper email notification of all steps taken by Dana Reserve developer.
> Honestly speaking, I am very surprised that the County at the **earliest stage** of Dana Reserve project (prior to execution of formal environmental report or any other documentation) doesn't require the developer to provide information about the number of oak trees that are subject to cut at the project.
> This question is core, in my opinion.
> Everything else is secondary upon circumstances.
> It is so easy to count such trees prior to the introduction of such a global project to the public and to the County.
> Simple mathematical counting doesn't require any special skills of engineering license.

Any private land surveyor can mark the spot/spots of proposed construction on the field (based on proposed site plan), and then the developer can easily count the number of trees in question and include this information in his introductory documentation.
Of course the developer voluntarily wouldn't do it if the County doesn't require him to do it.
As far as I understand, the developer doesn't want to attract attention in this topic now, but mainly talks about the great benefits that the County and its residents will receive from this project.
Maybe I am wrong but I believe there is nothing to discuss at Community Virtual Meeting "through polling technology" or at any other formal or informal meetings prior to understanding the approximate number of oak trees that are subject to death.
Unique oak forest doesn't belong to County staff or County officials.
Not only me and not only the residents of Nipomo and the County of San Luis Obispo are interested in the preservation of this unique forest.
The people of California and the people of the United States of America are also interested in this.
When the developer bought this plot in 2016, he clearly saw that there was an oak forest full of living creatures growing there.
The destruction of the old California oak forest with its flora and fauna on the flat parcel of land next to Highway 101 at the Central Coast on such a scale (**278 ac**) is a national issue.
I am sorry but this is my preliminary opinion.
According to my neighbor, she already observed a cut of oak trees on this piece of land a few years ago.
I did not ask her about the details, but now I will check with her.
I ask you to warn the developer that any destruction of oak trees now without the permission of the County could lead to civil and criminal liability.
I will provide my formal point of view on the merit later.
Thank you in advance for your understanding of my (immediate neighbor's) concern.
Sincerely yours
Alexander Glotov

On Thu, Mar 25, 2021 at 1:43 PM Jennifer Guetschow <jGuetschow@co.slo.ca.us> wrote:

Good afternoon Mr. Glotov,

Thank you for your email comments and questions about the proposed Dana Reserve. We have added your email correspondence to our files and your contact information to our Interested Parties list, to stay in touch with you.

Please see our responses to your questions below:

1. **HOW MANY LIVE OAK TREES IS PLANNED TO CUT WHEN CARRYING OUT DANA RESERVE PROJECT IN NIPOMO ?** **The impact to the Oak Tree population will be evaluated in the Environmental Impact Report. Since the Project may be changed from what was presented at the meeting last night, we do not have a definitive answer at this time.**

2. **Does the County have an independent clear report of competent professionals about sufficiency water resources to supply the occupancy of 1,270 residences and 200,000 sq. feet of commercial and light industrial space in the Dana Reserve development project in Nipomo?** **As part of the Environmental Impact Report contract we will have independent review by an expert as to the water supply and sufficiency for the proposed development.**

Warm Regards,

Jennifer

Jennifer Guetschow |**Senior Planner**
Long Range Division
(p) 805-788-2352 jguetschow@co.slo.ca.us

APPENDIX C

Off-Site NCSD Improvements Mapbook

DANA RESERVE

NCSD Sewer Improvements

2 - Proposed Sanitary Sewer Lift Station for Dana Reserve Development

Proposed Dana Reserve Connection

Dana Reserve Specific Plan Area

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0465°N 120.4944°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
Layout: NCSD Sewer Improvements

SWCA ENVIRONMENTAL CONSULTANTS

DANA RESERVE

NCSD Sewer Improvements

1 - Sanitary Sewer Extension

Proposed Dana Reserve Connection

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0429°N 120.4906°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
Layout: NCSD Sewer Improvements

SWCA
ENVIRONMENTAL CONSULTANTS

DANA RESERVE

NCSD Sewer Improvements

SWCA ENVIRONMENTAL CONSULTANTS

Proposed Dana Reserve Connection

Replace 10" with 15" Frontage Rd Trunk Sewer

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0393°N 120.4875°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
Layout: NCSD Sewer Improvements

DANA RESERVE

NCSD Sewer Improvements

3 - Sanitary Sewer Replacement

Replace 10" with 15" Frontage Rd Trunk Sewer

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0356°N 120.4844°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
Layout: NCSD Sewer Improvements

SWCA ENVIRONMENTAL CONSULTANTS

DANA RESERVE

NCSD Sewer Improvements

3 - Sanitary Sewer Replacement

Replace 10" with 15" Frontage Rd Trunk Sewer

Replace 12" with 18" Frontage Rd Trunk Sewer

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0324°N 120.4802°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
Layout: NCSD Sewer Improvements

SWCA
ENVIRONMENTAL CONSULTANTS

DANA RESERVE

NCSD Sewer Improvements

SWCA ENVIRONMENTAL CONSULTANTS

- Greater than 18" Frontage Rd Trunk Sewer
- Replace 12" with 18" Frontage Rd Trunk Sewer

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0289°N 120.4763°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
Layout: NCSD Sewer Improvements

DANA RESERVE

NCSD Sewer Improvements

Greater than 18" Frontage Rd Trunk Sewer

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0252°N 120.4724°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
Layout: NCSD Sewer Improvements

SWCA
ENVIRONMENTAL CONSULTANTS

DANA RESERVE

NCSD Sewer Improvements

SWCA ENVIRONMENTAL CONSULTANTS

Greater than 18" Frontage Rd Trunk Sewer

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0221°N 120.4691°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
Layout: NCSD Sewer Improvements

DANA RESERVE

NCSD Water Systems Improvements

Dana Reserve Development Water Mains
Proposed 12" Loop on Willow Rd
Dana Reserve Specific Plan Area

San Luis Obispo County, CA
NAD 1983 StatePlane California
V FIPS 0405 Feet
35.0521°N 120.5038°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
Layout: NCSD Water Improvements

SWCA
ENVIRONMENTAL CONSULTANTS

DANA RESERVE

NCSD Water Systems Improvements

- Dana Reserve Development Water Mains
- Proposed 16" on N Oak Glen Ave and Tefft St from Foothill Tanks
- Offsite N. Frontage Road Extension
- Dana Reserve Specific Plan Area

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0465°N 120.4928°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
Layout: NCSD Water Improvements

SWCA ENVIRONMENTAL CONSULTANTS

DANA RESERVE

NCSD Water Systems Improvements

SWCA ENVIRONMENTAL CONSULTANTS

Proposed 16" on N Oak Glen Ave and Tefft St from Foothill Tanks

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0435°N 120.4887°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
Layout: NCSD Water Improvements

DANA RESERVE

NCSD Water Systems Improvements

SWCA ENVIRONMENTAL CONSULTANTS

Proposed 16" on N Oak Glen Ave and Tefft St from Foothill Tanks

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0397°N 120.4846°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
Layout: NCSD Water Improvements

DANA RESERVE

NCSD Water Systems Improvements

SWCA ENVIRONMENTAL CONSULTANTS

Proposed 16" on N Oak Glen Ave and Tefft St from Foothill Tanks

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0399°N 120.4803°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
Layout: NCSD Water Improvements

DANA RESERVE

NCSD Water Systems Improvements

SWCA ENVIRONMENTAL CONSULTANTS

Proposed 16" on N Oak Glen Ave and Tefft St from Foothill Tanks

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0429°N 120.4765°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
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DANA RESERVE

NCSD Water Systems Improvements

SWCA ENVIRONMENTAL CONSULTANTS

Proposed 16" on N Oak Glen Ave and Tefft St from Foothill Tanks

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0461°N 120.4724°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
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DANA RESERVE

NCSD Water Systems Improvements

SWCA ENVIRONMENTAL CONSULTANTS

Proposed 16" on N Oak Glen Ave and Tefft St from Foothill Tanks

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0487°N 120.468°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
Layout: NCSD Water Improvements

DANA RESERVE

NCSD Water Systems Improvements

SWCA ENVIRONMENTAL CONSULTANTS

Proposed 16" on N Oak Glen Ave and Tefft St from Foothill Tanks

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0511°N 120.4646°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
Layout: NCSD Water Improvements

DANA RESERVE

NCSD Water Systems Improvements

SWCA ENVIRONMENTAL CONSULTANTS

Proposed 16" on N Oak Glen Ave and Tefft St from Foothill Tanks

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0539°N 120.461°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
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DANA RESERVE

NCSD Water Systems Improvements

SWCA ENVIRONMENTAL CONSULTANTS

Proposed 16" on N Oak Glen Ave and Tefft St from Foothill Tanks

San Luis Obispo County, CA
NAD 1983 StatePlane California V FIPS 0405 Feet
35.0559°N 120.4584°W

0 80 160 Feet
0 20 40 Meters

N

1:2,000

Base Map: ESRI ArcGIS Online, accessed April 2022
Updated: 4/25/2022
Project No. 64873
Aprx: 64873_DanaReserve_NCSD
Layout: NCSD Water Improvements

APPENDIX D

Air Quality and Greenhouse Gas Emissions Background Information

Air Quality & Greenhouse Gas Impact Assessment for Dana Reserve Specific Plan

AIR QUALITY & GREENHOUSE GAS IMPACT ASSESSMENT

FOR

DANA RESERVE SPECIFIC PLAN

NIPOMO, CA

FEBRUARY 2022

PREPARED FOR:

SWCA ENVIRONMENTAL CONSULTANTS, INC.
1422 MONTEREY STREET
SAN LUIS OBISPO, CA 93401

PREPARED BY:

AMBIENT AIR QUALITY & NOISE CONSULTING
75 HIGUERA ST, SUITE 105
SAN LUIS OBISPO CA 93401

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDICES

LIST OF COMMON TERMS & ACRONYMS

AAM	Annual Arithmetic Mean
ARB	California Air Resources Board
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CCAA	California Clean Air Act
CCAR	California Climate Action Registry
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
DPM	Diesel-Exhaust Particulate Matter or Diesel-Exhaust PM
FCAA	Federal Clean Air Act
GHG	Greenhouse Gases
HAP	Hazardous Air Pollutant
LOS	Level of Service
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards or National AAQS
NESHAPs	National Emission Standards for HAPs
NO_x	Oxides of Nitrogen
OAP	Ozone Attainment Plan
O_3	Ozone
Pb	Lead
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
ROG	Reactive Organic Gases
RTP	Regional Transportation Plan
SCCAB	South Central Coast Air Basin
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLOAPCD	San Luis Obispo County Air Pollution Control District
SLOCOG	San Luis Obispo Council of Governments
SCS	Sustainable Communities Strategy
SO_2	Sulfur Dioxide
TAC	Toxic Air Contaminant
$\mu g/m^3$	Micrograms per cubic meter
U.S. EPA	United State Environmental Protection Agency

INTRODUCTION

This report provides an analysis of air quality and greenhouse gas impacts associated with the proposed Dana Reserve Specific Plan 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.

PROPOSED PROJECT SUMMARY

The proposed Dana Reserve Specific Plan will provide a combination of land uses that include residential uses, flex commercial uses, open space, trails, and a public neighborhood park within an approximately 288-acre specific plan area. The plan will include 1,291 residential dwelling units (comprised of 833 single-family units and 458 multi-family units), between 110,000-203,00 square feet of commercial space, and roughly 50 acres to be preserved for open space and recreation. The project site is located in the southern portion of San Luis Obispo County, this property is immediately north of the Urban Reserve Line of the Nipomo community. It is bounded by Willow Road and Cherokee Place to the north, existing residential ranchettes to the south and west and U.S. Highway 101 to the east. The proposed Dana Reserve Specific Plan is depicted in Figure 1.

AIR QUALITY

Existing Setting

The project is located in Nipomo, an unincorporated town within the South Central Coast Air Basin (SCCAB) and within the jurisdiction of the San Luis Obispo County Air Pollution Control District (SLOAPCD). Air quality in the SCCAB is influenced by a variety of factors, including topography, local and regional meteorology.

Topography

Nipomo is on the Nipomo Mesa. The area is bordered on the south by the Santa Maria River Valley and east by the Temettate Ridge, to the west by flat-topped mesas and the Pismo Dunes, and to the north the rolling hills of Newsom Ridge. The highest elevations in the vicinity are in the Temettate Ridge, where many peaks are 1,300 to 1,800 feet above mean sea level. Substantial ridgelines are distributed throughout the north and east.

Local and Regional Meteorology

The climate of the county can be generally characterized as Mediterranean, with warm, dry summers and cooler, relatively damp winters. Along the coast, mild temperatures are the rule throughout the year due to the moderating influence of the Pacific Ocean. This effect is diminished inland in proportion to the distance from the ocean or by major intervening terrain features, such as the coastal mountain ranges. As a result, inland areas are characterized by a considerably wider range of temperature conditions. Maximum summer temperatures average about 70 degrees Fahrenheit near the coast, while inland valleys are often in the high 90s. Minimum winter temperatures average from the low 30s along the coast to the low 20s inland (SLOAPCD 2001).

Regional meteorology is largely dominated by a persistent high-pressure area which commonly resides over the eastern Pacific Ocean. Seasonal variations in the strength and position of this pressure cell cause seasonal changes in the weather patterns of the area. The Pacific High remains generally fixed several hundred miles offshore from May through September, enhancing onshore winds and opposing offshore winds. During spring and early summer, as the onshore breezes pass over the cool water of the ocean, fog and low clouds often form in the marine air layer along the coast. Surface heating in the interior valleys dissipates the marine layer as it moves inland (SLOAPCD 2001).

Figure 1. Proposed Dana Reserve Specific Plan & Nearby Land Uses

Not to Scale.

From November through April the Pacific High tends to migrate southward, allowing northern storms to move across the county. About 90 percent of the total annual rainfall is received during this period. Winter conditions are usually mild, with intermittent periods of precipitation followed by mostly clear days. Rainfall amounts can vary considerably among different regions in the county. In the Coastal Plain, annual rainfall averages 16 to 28 inches, while the Upper Salinas River Valley generally receives about 12 to 20 inches of rain. The Carrizo Plain is the driest area of the county with less than 12 inches of rain in a typical year (SLOAPCD 2001).

Airflow around the county plays an important role in the movement and dispersion of pollutants. The speed and direction of local winds are controlled by the location and strength of the Pacific High-pressure system and other global patterns, by topographical factors, and by circulation patterns resulting from temperature differences between the land and sea. In spring and summer months, when the Pacific High attains its greatest strength, onshore winds from the northwest generally prevail during the day. At night, as the sea breeze dies, weak drainage winds flow down the coastal mountains and valleys to form a light, easterly land breeze (SLOAPCD 2001).

In the Fall, onshore surface winds decline and the marine layer grows shallow, allowing an occasional reversal to a weak offshore flow. This, along with the diurnal alternation of land-sea breeze circulation, can sometimes produce a "sloshing" effect. Under these conditions, pollutants may accumulate over the ocean for a period

of one or more days and are subsequently carried back onshore with the return of the sea breeze. Strong inversions can form at this time, "trapping" pollutants near the surface (SLOAPCD 2001).

This effect is intensified when the Pacific High weakens or moves inland to the east. This may produce a "Santa Ana" condition in which air, often pollutant-laden, is transported into the county from the east and southeast. This can occur over a period of several days until the high-pressure system returns to its normal location, breaking the pattern. The breakup of a Santa Ana condition may result in relatively stagnant conditions and a buildup of pollutants offshore. The onset of the typical daytime sea breeze can bring these pollutants back onshore, where they combine with local emissions to cause high pollutant concentrations. Not all occurrences of the "post-Santa Ana" condition lead to high ambient pollutant levels, but it does play an important role in the air pollution meteorology of the county (SLOAPCD 2001).

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 (SLOAPCD 2001).

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 (SLOAPCD 2001).

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 (SLOAPCD 2001).

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; however, levels as low as 250 feet, among the lowest anywhere in the state, have been recorded on the coastal plateau in San Luis Obispo county. 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 Clean Air Act (CAA) 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 US 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 CAA 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 1. Within the SCCAB, the air pollutants of primary concern, with regard to human health, include ozone, particulate matter (PM) and carbon monoxide (CO). As depicted in Table 1, exposure to increased pollutant concentrations of ozone, PM and CO can result in various heart and lung ailments, cardiovascular and nervous system impairment, and death.

Table 1. Common Pollutants & Adverse Effects

Pollutant	Human Health & Welfare Effects
Particulate Matter (PM_{10} & $PM_{2.5}$)	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
Ozone (O_3)	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield. Damages rubber, some textiles, and dyes.
Sulfur Dioxide (SO_2)	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel; damage crops and natural vegetation. Impairs visibility. A precursor to acid rain.
Carbon Monoxide (CO)	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO_2)	Respiratory irritant; aggravates lung and heart problems. A precursor to ozone and acid rain. Contributes to global warming, and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Lead	Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ. Affects animals, plants, and aquatic ecosystems.

Source: ARB 2018

Reactive Organic Gas (ROG) is a reactive chemical gas, composed of hydrocarbon compounds that may contribute to the formation of smog by their involvement in atmospheric chemical reactions. No separate health standards exist for ROG as a group. Because some compounds that make up ROG are also toxic, like the carcinogen benzene, they are often evaluated as part of a toxic risk assessment. Total Organic Gases (TOGs) includes all of the ROGs, in addition to low reactivity organic compounds like methane and acetone. ROGs and VOC are subsets of TOG.

Volatile Organic Compounds (VOC) are hydrocarbon compounds that exist in the ambient air. VOCs contribute to the formation of smog and may also be toxic. VOC emissions are a major precursor to the formation of ozone. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints.

Oxides of Nitrogen (NO_X) are a family of gaseous nitrogen compounds and is a precursor to the formation of ozone and particulate matter. The major component of NO_X, nitrogen dioxide (NO_2), is a reddish-brown gas that is toxic at high concentrations. NO_X results primarily from the combustion of fossil fuels under high temperature and pressure. On-road and off-road motor vehicles and fuel combustion are the major sources of this air pollutant.

Particulate Matter (PM), also known as particle pollution, is a complex mixture of extremely small particles and liquid droplets. Particle pollution is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to their potential for causing health problems. U.S. EPA is concerned about particles that are 10 micrometers in diameter or smaller because those are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects. U.S. EPA groups particle pollution into three categories based on their size and where they are deposited:

- Inhalable coarse particles ($PM_{2.5}$- PM_{10}), such as those found near roadways and dusty industries, are between 2.5 and 10 micrometers in diameter. $PM_{2.5\text{-}10}$ is deposited in the thoracic region of the lungs.
- Fine particles ($PM_{2.5}$), such as those found in smoke and haze, are 2.5 micrometers in diameter and smaller. These particles can be directly emitted from sources such as forest fires, or they can form when gases emitted from power plants, industries and automobiles react in the air. They penetrate deeply into the thoracic and alveolar regions of the lungs.
- Ultrafine particles (UFP), are very small particles less than 0.1 micrometers in diameter largely resulting from the combustion of fossils fuels, meat, wood, and other hydrocarbons. While UFP mass is a small portion of $PM_{2.5}$, its high surface area, deep lung penetration, and transfer into the bloodstream can result in disproportionate health impacts relative to their mass.

PM_{10}, $PM_{2.5}$, and UFP include primary pollutants (emitted directly to the atmosphere) as well as secondary pollutants (formed in the atmosphere by chemical reactions among precursors). Generally speaking, $PM_{2.5}$ and UFP are emitted by combustion sources like vehicles, power generation, industrial processes, and wood burning, while PM_{10} sources include these same sources plus roads and farming activities. Fugitive windblown dust and other area sources also represent a source of airborne dust.

Numerous scientific studies have linked both long- and short-term particle pollution exposure to a variety of health problems. Long-term exposures, such as those experienced by people living for many years in areas with high particle levels, have been associated with problems such as reduced lung function and the development of chronic bronchitis and even premature death. Short-term exposures to particles (hours or days) can aggravate lung disease, causing asthma attacks and also acute (short-term) bronchitis, and may also increase susceptibility to respiratory infections. In people with heart disease, short-term exposures have been linked to heart attacks and arrhythmias. Healthy children and adults have not been reported to suffer serious effects from short term exposures, although they may experience temporary minor irritation when particle levels are elevated.

Carbon Monoxide (CO) is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels and is emitted directly into the air (unlike ozone). The main source of CO is on-road motor vehicles. Other CO sources include other mobile sources, miscellaneous processes, and fuel combustion from stationary sources. Because of the local nature of CO problems, ARB and U.S. EPA designate urban areas as CO nonattainment areas instead of the entire basin as with ozone and PM_{10}. Motor vehicles are by far the largest source of CO emissions. Emissions from motor vehicles have been declining since 1985, despite increases in vehicle miles traveled, with the introduction of new automotive emission controls and fleet turnover.

Sulfur Dioxide (SO_2) is a colorless, irritating gas with a "rotten egg" smell formed primarily by the combustion of sulfur-containing fossil fuels. However, like airborne NO_X, suspended SO_X particles contribute to poor visibility. These SO_X particles can also combine with other pollutants to form $PM_{2.5}$. The prevalence of low-sulfur fuel use has minimized problems from this pollutant.

Lead (Pb) is a metal that is a natural constituent of air, water, and the biosphere. Lead is neither created nor destroyed in the environment, so it essentially persists forever. The health effects of lead poisoning include loss of appetite, weakness, apathy, and miscarriage. Lead can also cause lesions of the neuromuscular system, circulatory system, brain, and gastrointestinal tract. Gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels. The use of leaded fuel has been mostly phased out, with the result that ambient concentrations of lead have dropped dramatically.

Hydrogen Sulfide (H_2S) is associated with geothermal activity, oil and gas production, refining, sewage treatment plants, and confined animal feeding operations. Hydrogen sulfide is extremely hazardous in high concentrations; especially in enclosed spaces (800 ppm can cause death). OSHA regulates workplace exposure to H_2S.

Other Pollutants

The State of California has established air quality standards for some pollutants not addressed by Federal standards. The California Air Resources Board (CARB) has established State standards for hydrogen sulfide, sulfates, vinyl chloride, and visibility reducing particles. The following section summarizes these pollutants and provides a description of the pollutants' physical properties, health and other effects, sources, and the extent of the problems.

Sulfates (SO_4^{2-}) are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features.

The ARB sulfate standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardiopulmonary disease. Sulfates are particularly effective in degrading visibility, and, due to the fact that they are usually acidic, can harm ecosystems and damage materials and property.

Visibility Reducing Particles: Are a mixture of suspended particulate matter consisting of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. The standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

Vinyl Chloride (C_2H_3Cl or **VCM)** is a colorless gas that does not occur naturally. It is formed when other substances such as trichloroethane, trichloroethylene, and tetrachloro-ethylene are broken down. Vinyl chloride is used to make polyvinyl chloride (PVC) which is used to make a variety of plastic products, including pipes, wire and cable coatings, and packaging materials.

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 SLOAPCD does not have an individual rule or regulation that specifically addresses odors; however, odors would be applicable to SLOAPCD's Rule 204, Nuisance. Any actions related to odors would be based on citizen complaints to local governments and the SLOAPCD. The SLOAPCD 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 AAQS. TACs are not considered criteria pollutants in that the federal and California Clean Air Acts do not address them specifically through the setting of National or State AAQS. Instead, the U.S. EPA and 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 levels, 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.

Within California, TACs are regulated primarily through the Tanner Air Toxics Act (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.

At the state level, the ARB has authority for the regulation of emissions from motor vehicles, fuels, and consumer products. Most recently, Diesel-exhaust particulate matter (DPM) was added to the ARB list of TACs. DPM is the primary TACs of concern for mobile sources. Of all controlled TACs, emissions of DPM are estimated to be responsible for about 70 percent of the total ambient TAC risk. The ARB has made the reduction of the public's exposure to DPM one of its highest priorities, with an aggressive plan to require cleaner diesel fuel and cleaner diesel engines and vehicles (ARB 2005).

At the local level, air districts have authority over stationary or industrial sources. All projects that require air quality permits from the SLOAPCD are evaluated for TAC emissions. The SLOAPCD limits emissions and public exposure to TACs through a number of programs. The SLOAPCD prioritizes TAC-emitting stationary sources, based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors. The SLOAPCD requires a comprehensive health risk assessment for facilities that are classified in the significant-risk category, pursuant to AB 2588. No major existing sources of TACs have been identified in the project area.

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, which was identified as a TAC in 1986 by ARB, is located in many parts of California and is commonly associated with ultramafic rock. The project site is not located within an area identified as having a potential for naturally-occurring ultramafic rock and serpentine soils. However, the project site is located in the vicinity of areas identified by SLOAPCD as having a potential for NOA. The proposed project would not require the demolition of existing structures.

Ambient Air Quality

Air pollutant concentrations are measured at several monitoring stations in the SCCAB. The Nipomo Regional Park and Nipomo Guadalupe Road Monitoring Stations are the closest representative monitoring stations with sufficient data to meet U.S. EPA and/or ARB criteria for quality assurance. The monitoring stations record ambient concentrations of ozone, nitrogen dioxide, $PM_{2.5}$, and 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 2. As depicted, the national standard for $PM_{2.5}$ was exceeded once in 2018 and 7 times in 2020. Measured 1-hour ozone, NO_2, and PM_{10} concentrations did not exceed the state and federal ambient air quality standards in the last three years of monitoring.

Table 2. Summary of Ambient Air Quality Monitoring Data

Pollutant	Monitoring Year		
	2018	2019	2020
Ozone (O_3)[1]			
Maximum concentration (1-hour/8-hour average; ppm)	0.063/0.055	0.064/0.054	0.067/0.064
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)[1]			
Maximum concentration (1-hour average; ppb)	25	25	23
Annual average (ppb)	2	2	2
Number of days state/national standard exceeded	0/0	0/0	0/0
Suspended Particulate Matter ($PM_{2.5}$)[2]			
Maximum 24-hour concentration (national/state; µg/m3)	38.3	23.6	84.5
Annual average national/state (µg/m3)	7.5/7.6	7.0/7.0	9.4/9.5
Number of days national standard exceeded (measured/calculated)[3]	1/1	0/0	7/7.3
Suspended Particulate Matter (PM_{10})[1]			
Maximum concentration (national/state; µg/m3)	89.8	142.7	104.2
Number of days state standard exceeded (measured/calculated)[3]	20/20	15/NA	17/17
Number of days national standard exceeded (measured/calculated)[3]	0/0	0/0	0/0

ppm = parts per million by volume, µg/m^3 = micrograms per cubic meter, NA=Not Available

1. Based on ambient concentrations obtained from the Nipomo-Regional Park Monitoring Station.

2. Based on ambient concentrations obtained from the Nipomo-Guadalupe Road Monitoring Station.

3. Measured days are those days that an actual measurement was greater than the standard. Calculated days are estimated days that measurement would have exceeded the standard had measurements been collected every day.

Source: ARB 2021b

Regulatory Framework

Air quality within the SCCAB is regulated by several jurisdictions including the U.S. EPA, ARB, and the SLOAPCD. 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 US EPA to establish National Ambient Air Quality Standards (NAAQS or National AAQS), 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 3.

State

CALIFORNIA AIR RESOURCES BOARD

The California Air Resources Board (ARB) is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (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 3. 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 Ozone, CO, 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.

IN-USE OFF-ROAD DIESEL VEHICLE REGULATION

On July 26, 2007, the ARB adopted a regulation to reduce diesel particulate matter (PM) and oxides of nitrogen (NOx) 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 California Building Code 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 California Building Code 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.

Table 3. Summary of Ambient Air Quality Standards & Attainment Designations

Pollutant	Averaging Time	California Standards****		Federal Standards****	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m³)	Non-Attainment	–	Non-Attainment Eastern SLO County - Attainment Western SLO County***
	8 Hour	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)******	
Respirable Particulate Matter (PM10)	24 Hour	50 µg/m³	Non-Attainment	150 µg/m³	Unclassified*/ Attainment
	Annual Arithmetic Mean	20 µg/m³		–	
Fine Particulate Matter (PM2.5)	24 Hour	No State Standard	Attainment	35 µg/m³	Unclassified*/ Attainment
	Annual Arithmetic Mean	12 µg/m³		12.0 µg/m³ *****	
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m³)	Attainment	9 ppm (10 mg/m³)	Unclassified*
	1 Hour	20 ppm (23 mg/m³)		35 ppm (40 mg/m³)	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)	Attainment	0.053 ppm (100 µg/m³)	Unclassified*
	1 Hour	0.18 ppm (330 µg/m³)		100 ppb (196 mg/m³)	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	–	Attainment	0.030 ppm (80 µg/m³)	Unclassified*
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (365 µg/m³)	
	3 Hour	–		0.5 ppm (1300 µg/m³)**	
	1 Hour	0.25 ppm (655 µg/m³)		75 ppb (196 mg/m³)	
Lead*	30 Day Average	1.5 µg/m³	Attainment	–	No Attainment Information
	Calendar Quarter	–		1.5 µg/m³	
	Rolling 3-Month Average*	–		0.15 µg/m³	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer – visibility of ten miles or more (0.07-30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.	Attainment	No Federal Standards	
Sulfates	24 Hour	25 µg/m³	Attainment		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Attainment		
Vinyl Chloride*	24 Hour	0.01 ppm (26 µg/m³)	No Attainment Information		

* Unclassified (EPA/Federal definition): Any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for that pollutant. ** Secondary Standard

*** San Luis Obispo County has been designated non-attainment east of the -120.4 deg Longitude line, in areas of SLO County that are south of latitude 35.45 degrees, and east of the -120.3 degree Longitude line, in areas of SLO County that are north of latitude 35.45 degrees. Map of non-attainment area is available upon request from the APCD. **** For more information on standards visit:http://ww.arb.ca.gov.research/aaqs/aaqs2.pdf

Attainment (EPA/Federal definition): Any area that meets the national primary or secondary ambient air quality standard for that pollutant. (CA definition): State standard was not exceeded during a three year period. ***** Federal PM2.5 Secondary Standard is 15µg/m³

Non-Attainment (EPA/Federal definition): Any area that does not meet, or contributes to an area that does not meet the national primary or secondary ambient air quality standard for that pollutant. (CA definition): State standard was exceeded at least once during a three year period. ******The 2008 NAAQS for 8hr ozone is 0.075 ppm. The 2015 NAAQS for 8hr ozone is 0.070 ppm. The attainment status shown in this table relates to the 2008 and 2015 NAAQS. SLO County has been designated non-attainment of the 2015 NAAQS. NAAQS is National Ambient Air Quality Standards H:\OUTREACH\AttainmentStatus Revised January 29, 2019

Source: SLOAPCD 2020

The 2019 Building Energy Efficiency Standards (2019 Standards), previously 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. The solar PV systems are to be sized based on the buildings annual electricity demand, the building square footage, and the climate zone within which the home is located. However, under the *2019 Building Energy Efficiency Standards,* homes may still rely on other energy sources, such as natural gas. Compliance with the *2019 Building Energy Efficiency Standards,* including the solar PV system mandate, residential dwellings will use approximately 50 to 53 percent less energy than those under the 2016 standards. Actual reduction will vary depending on various factors (e.g., building orientation, sun exposure). Non-residential 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

COUNTY OF SAN LUIS OBISPO AIR POLLUTION CONTROL DISTRICT

The SLOAPCD 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 SLOAPCD 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 *State 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 SLOAPCD has developed recommended significance thresholds, which are contained in the SLOAPCD's *CEQA Air Quality Handbook* (2012). For the purposes of

this analysis, project emissions are considered potentially significant impacts if any of the following SLOAPCD thresholds are exceeded:

Construction Impacts

The threshold criteria established by the SLOAPCD to determine the significance and appropriate mitigation level for a project's short-term construction emissions are presented in Table 4 and discussed, as follows (SLOAPCD 2012):

Table 4. SLOAPCD Thresholds of Significance for Project-Level Construction Impacts

Pollutant	Threshold (1)		
	Daily (lbs/day)	Quarterly Tier 1 (tons)	Quarterly Tier 2 (tons)
Ozone Precursors (ROG + NO_X)	137	2.5	6.3
Diesel Particulate Matter (DPM)	7	0.13	0.32
Fugitive Particulate Matter (PM_{10}), Dust (2)	None	2.5	None

1. Daily and quarterly emissions thresholds are based on the California Health & Safety Code and the ARB Carl Moyer Guidelines.
2. Any project with a grading area greater than 4.0 acres of a worked area can exceed the 2.5 tons PM10 quarterly threshold.
Source: SLOAPCD 2012

ROG and NOx Emissions

Daily: For construction projects exceeding the 137 lbs/day threshold requires Standard Mitigation Measures;

Quarterly – Tier 1: For construction projects exceeding the 2.5 tons/quarter threshold, require Standard Mitigation Measures and Best Available Control Technology (BACT) for construction equipment. Off-site mitigation may be required if feasible mitigation measures are not implemented, or if no mitigation measures are feasible for the project.

Quarterly – Tier 2: For construction projects exceeding the 6.3 tons/quarter threshold, require Standard Mitigation Measures, BACT, implementation of a Construction Activity Management Plan (CAMP) and off-site mitigation are required.

Diesel Particulate Matter (DPM) Emissions

Daily: For construction projects exceeding the 7 lbs/day threshold, require Standard Mitigation Measures;

Quarterly - Tier 1: For construction projects exceeding the 0.13 tons/quarter threshold, require Standard Mitigation Measures, BACT for construction equipment; and,

Quarterly - Tier 2: For construction projects exceeding the 0.32 tons/quarter threshold, require Standard Mitigation Measures, BACT, implementation of a CAMP, and off-site mitigation.

Fugitive Particulate Matter (PM10), Dust Emissions

Quarterly- Tier 1: For construction projects exceeding the 2.5 tons/quarter threshold requires Fugitive PM_{10} Mitigation Measures and may require the implementation of a CAMP.

Operational Impacts

Criteria Air Pollutants

The threshold criteria established by the SLOAPCD to determine the significance and appropriate mitigation level for long-term operational emissions from a project are presented in Table 5. Projects exceeding the 25 ton/year threshold may be required to complete an Activity Management Plan (AMP), which would be constructed in a similar manner to the CAMP mitigation approach for construction-related emissions.

Table 5. SLOAPCD Thresholds of Significance for Project-Level Operational Impacts

Pollutant	Threshold (1)	
	Daily (lbs/day)	Annual (tons/year)
Ozone Precursors (ROG + NO_X)	25	25
Diesel Particulate Matter (DPM)	1.25	None
Fugitive Particulate Matter (PM_{10}), Dust	25	25
CO	550	None

1. Daily and annual emissions thresholds are based on the California Health & Safety Code Division 26, Part 3, Chapter 10, Section 40918 and the ARB Carl Moyer Guidelines for DPM.
Source: SLOAPCD 2012

Toxic Air Contaminants

If a project has the potential to emit toxic or hazardous air pollutants or is located in close proximity to sensitive receptors, impacts may be considered significant due to increased cancer risk for the affected population. The SLOAPCD has defined the excess cancer risk significance threshold at 10 in a million for projects.

Localized CO Concentrations

Localized CO concentrations associated with the proposed project would be considered a less-than-significant impact if: (1) Traffic generated by the proposed project would not result in deterioration of signalized intersection level of service (LOS) to LOS E or F; or (2) the project would not contribute additional traffic to a signalized intersection that already operates at LOS of E or F.

Odors

Screening of potential odor impacts is typically recommended for the following two situations:

- Projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate; and
- Residential or other sensitive receptor projects or other projects that may attract people locating near existing odor sources.

If the proposed project would locate receptors and known odor sources within one mile of each other, a full analysis of odor impacts is recommended. Known odor sources of primary concern, as identified by the SLOAPCD include landfills, transfer stations, asphalt batch plants, rendering plants, petroleum refineries, and painting/coating operations, as well as, composting, food processing, wastewater treatment, chemical manufacturing, and feedlot/dairy facilities.

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 96-month period beginning in 2023. According to project specific plan, no material would be imported or exported, and no existing structures would be demolished. Additional construction information, such as construction activities, construction schedules, equipment use, and vehicle trips were not available and were based on default parameters contained in the model. Construction of the proposed land uses was assumed to require grubbing (removal of brush/trees), site preparation, grading, building construction, paving, and application of architectural coatings. Project construction information is preliminary and is subject to change. 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. 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 (CCTC 2021). Vehicle travel distribution/distances were not available and were based on model defaults for San Luis Obispo County. Emission modeling files are provided in Appendix C.

Project Impacts and Mitigation Measures

Impact AQ-A. Conflict with or obstruct implementation of the applicable air quality plan?

SLOAPCD Clean Air Plan

As part of the CCAA, the SLOAPCD is required to develop a plan to achieve and maintain the state ozone standard by the earliest practicable date. The SLOAPCD's 2001 Clean Air Plan (CAP) addresses the attainment and maintenance of state and federal ambient air quality standards. The CAP was adopted by SLOAPCD's on March 26, 2002.

The SLOAPCD's CAP outlines the district's strategies to reduce ozone-precursor pollutants (i.e., ROG and NOX) from a wide variety of sources. The SLOAPCD's CAP 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 and use. The stationary-source control program is administered by SLOAPCD. 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 SLOAPCD to forecast population-related emissions and air quality attainment, including those contained in the SLOAPCD's CAP. As a result, consistency with the SLOAPCD's CAP has been evaluated based on the proposed project's consistency with the land use management strategies and transportation control measures identified in the CAP. This analysis also provides an analysis of regional vehicle miles traveled (VMT) and consistency with regional VMT-reduction efforts. Regional VMT estimates are relied upon for regional air quality planning purposes. Regional VMT and growth projections are used to determine the strategies to be implemented sufficient to reach the emission reduction targets set by the California Air Resources Board through SB 375 which is transportation legislation that supports the broader 2030 emission reduction targets required in SB 32.

Transportation and Land Use Control Measures

The SLOAPCD's CAP includes multiple transportation and land use control measures intended to reduce emissions through reductions in VMT and the promotion of alternative forms of transportation. The control measures applicable to the proposed project are summarized in Table 6. As noted the proposed project would be considered consistent with these applicable measures.

Jobs-Housing Balance

The proposed project is located within the Nipomo Community Services District Sphere of Influence. Nipomo is an unincorporated area that is jobs poor. The project would result in the creation of 1,441 dwelling units and approximately 273 new jobs, which would increase the gap between jobs and housing. Deterioration in a jobs-to-housing imbalance would be anticipated to hinder local and regional improvements related to increased transportation mobility and potential increase in VMT. The proposed project would be inconsistent with this measure.

Projected VMT Growth

The proposed project includes creation of single family residential units, multi-family residential units, flex commercial space, commercial retail space, and a hotel. Table 7 presents a summary of project VMT impacts. As depicted, the project would generate 26.9 VMT per employee and 30.0 VMT per capita, which are 4.46 percent and 9.34 percent above the country threshold. Regional VMT would also be expected to increase by 26,861 miles which exceed the significance threshold of retail and other projects to have no net increase in overall VMT (CCTC 2021).

Implementation of the proposed project would worsen the jobs-housing balance within the project area, as well as result in increases in regional VMT in excess of applicable per capita thresholds. As a result, this impact would be considered ***potentially* significant**.

Table 6. Project Consistency with SLOAPCD's CAP Transportation and Land Use Control Measures

Control Measures	Project Consistency
Land Use Planning Strategies	
L-3 Balancing Jobs and Housing. • Within cities and unincorporated communities, the gap between the availability of jobs and housing should be narrowed and should not be allowed to expand.	**Inconsistent**. The proposed project is located within the Nipomo Community Services District Sphere of Influence. Nipomo is an unincorporated area that is jobs poor. The project would result in the creation of 1,441 dwelling units and approximately 273 new jobs, which would increase the gap between jobs and housing. Deterioration in a jobs-to-housing imbalance would be anticipated to hinder local and regional improvements related to increased transportation mobility and potential increase in VMT. The proposed project would be inconsistent with this measure. (SLOCOG 2019)
Transportation Control Measures	
T-2B Regional Public Transit Improvements. • The goal of this measure is to improve transit service and facilities that will promote increased public transit use instead of a private automobile.	**Consistent with Mitigation Incorporated**. • Transit service is does not have a route that passes the project location. • The Project site and expansion supports the use of bicycle and pedestrian activity. Sidewalks are provided adjacent to and onto the site. The project proposes to maintain bicycle and pedestrian accommodation. • Mitigation Measure AQ-3 would additional measures to reduce operational emissions, including the installation of bicycle storage per current building code requirements.
T-3 Bicycling and Bikeway Enhancements. • The goal of this measure is to encourage a modal shift to bicycles through implementation of infrastructure improvements and administrative actions that provide inexpensive commute options and increased safety and convenience for commuters.	
T-8 Teleworking, Teleconferencing, and Telelearning. • The objective of this measure is to reduce the number of trips and miles traveled by employees and students by promoting teleworking, tele-conferencing and telelearning.	• **Consistent with Mitigation**. As noted above, operations includes numerous measures and site design elements are implemented to reduce employee-related trips.

Table 7. Project VMT Impact Summary

Category	VMT Per Employee	VMT Per Capita
County Threshold	25.7	27.2
Proposed Project	26.9	30.0
Percent Reduction in VMT Required to Reduce to Below Threshold	4.46%	9.34%
Source: CCTC 2021		

Particulate Matter Report – Implementation of SB 656 Requirements

In July 2005, SLOAPCD adopted the *Particulate Matter Report* (PM Report). The PM Report identifies various measures and strategies to reduce public exposure to PM emitted from a wide variety of sources, including emissions from permitted stationary sources and fugitive sources, such as construction activities. As discussed in Impact AQ-B, uncontrolled fugitive dust generated during construction may result in localized pollutant concentrations that may result in increased nuisance concerns to nearby land uses. Therefore, construction-generated emissions of PM would be considered to have a ***potentially significant*** impact with regard to air quality planning efforts.

Mitigation Measures

Implement Mitigation Measures AQ-1 through AQ-3 (refer to Impact AQ-B).

Significance After Mitigation

Implementation of Mitigation Measures AQ-1 and AQ-2 would include measures to reduce construction-generated emissions. Mitigation Measures AQ-3 would include measures to reduce operational emissions.

Together these measures would help to provide consistency with the measures identified in the SLOAPCD's CAP. However, mitigated emissions would still exceed SLOAPCD's recommended significant thresholds. In addition, as previously noted, implementation of the proposed project could hinder local and regional jobs-to-housing balance and result in VMT growth beyond applicable per capita thresholds. This impact would be considered ***significant and unavoidable.***

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 and excavation, 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., 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 daily and quarterly emissions associated with construction of the proposed project are presented in Table 8 and Table 9, respectively, and summarized in Table 10.

As depicted in Tables 8 and tables 10, maximum daily emissions associated with the construction of the proposed project would total approximately 210.39 lbs/day of ROG+NO_X and 3.69 lbs/day of exhaust PM_{10}. As depicted in Tables 9 and 10, maximum quarterly construction-generated emissions would total approximately 4.46 tons/quarter of ROG+NO_X, 0.96 tons/quarter of fugitive PM_{10}, and 0.06 tons/quarter of exhaust PM_{10}. Maximum daily and quarterly construction emissions of ROG+NO_X would exceed SLOAPCD's daily and quarterly Tier 1 significance thresholds, but would not exceed the quarterly Tier 2 significance threshold. 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. Estimated emissions of fugitive PM and DPM would not exceed SLOAPCD's significance thresholds. However, if uncontrolled, fugitive dust generated during construction may result in localized pollutant concentrations that could exceed ambient air quality standards and result in increased nuisance concerns to nearby land uses. For these reasons, construction-generated emissions would be considered to have a ***potentially significant impact***.

Table 8. Daily Construction Emissions Without Mitigation

Construction Activity	Construction Year	Maximum Daily Emissions (lbs/day)[1]	
		ROG+NO_X	Exhaust PM_{10}
Grubbing	2023	23.84	1.00
Site Prep	2023	30.29	1.27
Grading	2023	37.95	1.42
Residential – Building Construction	2024	51.25	0.61
Residential – Architectural Coating	2024	40.98	0.08
Commercial & Educational - Building Construction	2024	18.25	0.61
Commercial & Educational - Architectural Coating	2024	3.81	0.06
Residential – Building Construction	2025	48.87	0.53
Residential – Architectural Coating	2025	40.76	0.05
Commercial & Educational - Building Construction	2025	17.09	0.53
Commercial & Educational - Architectural Coating	2025	3.73	0.05
Residential – Building Construction	2026	47.69	0.53
Residential – Architectural Coating	2026	40.63	0.05
Commercial & Educational - Building Construction	2026	16.96	0.53
Commercial & Educational - Architectural Coating	2026	3.72	0.05
Hotel – Building Construction	2026	14.35	0.53
Hotel – Paving	2026	8.45	0.35
Hotel – Architectural Coating	2026	78.59	0.05
Residential – Building Construction	2027	49.61	0.53
Residential – Architectural Coating	2027	40.52	0.05
Commercial & Educational - Building Construction	2027	16.86	0.53
Commercial & Educational - Architectural Coating	2027	3.70	0.05
Residential – Building Construction	2028	45.65	0.53
Residential – Architectural Coating	2028	40.59	0.05
Commercial & Educational - Building Construction	2028	16.78	0.53
Commercial & Educational - Architectural Coating	2028	3.70	0.05
Residential – Building Construction	2029	44.72	0.53
Residential – Architectural Coating	2029	40.49	0.05
Commercial & Educational - Building Construction	2029	16.70	0.53
Commercial & Educational - Architectural Coating	2029	3.69	0.05
Commercial & Educational - Paving	2029	10.23	0.42
Residential – Building Construction	2030	39.34	0.15
Residential – Architectural Coating	2030	40.08	0.02
Residential – Paving	2030	8.56	0.33
SLOAPCD Daily Thresholds (pounds/day)		**137**	**7**
Maximum Daily Emissions-Year 2023		92.08	3.69
Exceed SLOAPCD Thresholds?		No	No
Maximum Daily Emissions-Year 2024		114.29	1.36
Exceed SLOAPCD Thresholds?		No	No
Maximum Daily Emissions-Year 2025		110.45	1.16
Exceed SLOAPCD Thresholds?		No	No
Maximum Daily Emissions-Year 2026		210.39	2.09
Exceed SLOAPCD Thresholds?		**Yes**	No
Maximum Daily Emissions-Year 2027		110.69	1.16
Exceed SLOAPCD Thresholds?		No	No
Maximum Daily Emissions-Year 2028		106.72	1.16
Exceed SLOAPCD Thresholds?		No	No
Maximum Daily Emissions-Year 2029		115.83	1.58
Exceed SLOAPCD Thresholds?		No	No
Maximum Daily Emissions-Year 2030		87.98	0.50
Exceed SLOAPCD Thresholds?		No	No

Maximum Daily Emissions: Based on construction schedule information provided and default assumptions contained in the CalEEMod computer model. Assumes that construction, paving, and application of architectural coatings could potentially occur simultaneously on any given day. To be conservative, exhaust PM_{10} emissions were compared to SLOAPCD's DPM threshold. Totals may not sum due to rounding. Refer to Appendix C for modeling assumptions and results.

1. Maximum daily emissions include on-site and off-site emissions.

Table 9. Quarterly Construction Emissions Without Mitigation

Quarter	Maximum Quarterly Emissions (tons)[1]			
	ROG+NO_X	PM_{10}		
		Fugitive	Exhaust[2]	Total
Year 2023 - Quarter 1	1.42	0.45	0.05	0.51
Year 2023 - Quarter 2	1.50	0.63	**0.06**	0.69
Year 2023 - Quarter 3	1.20	0.30	0.04	0.34
Year 2023 - Quarter 4	1.18	0.29	0.04	0.34
Year 2024 - Quarter 1	2.62	0.78	0.04	0.83
Year 2024 - Quarter 2	3.53	0.88	0.04	0.93
Year 2024 - Quarter 3	3.53	0.88	0.04	0.93
Year 2024 - Quarter 4	3.54	0.86	0.04	0.91
Year 2025 - Quarter 1	3.43	0.86	0.04	0.91
Year 2025 - Quarter 2	3.30	0.88	0.03	0.92
Year 2025 - Quarter 3	3.30	0.88	0.04	0.92
Year 2025 - Quarter 4	3.42	0.86	0.04	0.91
Year 2026 - Quarter 1	3.82	0.87	0.05	0.93
Year 2026 - Quarter 2	3.82	0.88	0.05	0.95
Year 2026 - Quarter 3	3.82	0.88	0.05	0.95
Year 2026 - Quarter 4	**4.46**	0.87	0.05	0.93
Year 2027 - Quarter 1	3.34	0.86	0.04	0.91
Year 2027 - Quarter 2	3.33	**0.96**	0.04	0.91
Year 2027 - Quarter 3	3.33	**0.96**	0.04	**1.00**
Year 2027 - Quarter 4	3.34	0.86	0.04	0.91
Year 2028 - Quarter 1	3.31	0.86	0.04	0.90
Year 2028 - Quarter 2	3.30	0.88	0.04	0.92
Year 2028 - Quarter 3	3.30	0.88	0.04	0.92
Year 2028 - Quarter 4	3.31	0.86	0.04	0.90
Year 2029 - Quarter 1	3.27	0.86	0.04	0.90
Year 2029 - Quarter 2	3.27	0.88	0.04	0.92
Year 2029 - Quarter 3	3.27	0.88	0.04	0.92
Year 2029 - Quarter 4	3.22	0.85	0.03	0.89
Year 2030 - Quarter 1	2.64	0.80	0.01	0.82
Year 2030 - Quarter 2	2.72	0.82	0.02	0.84
Year 2030 - Quarter 3	2.72	0.82	0.02	0.84
Year 2030 - Quarter 4	2.64	0.80	0.01	0.82
SLOAPCD Quarterly Tier 1/Tier 2 Thresholds (tons/quarter)	**2.5/6.3**	**2.5/None**	**0.13/0.32**	**None**
Maximum Quarterly Emissions:	4.46	0.96	0.06	1.00
Exceed SLOAPCD Tier 1/Tier 2 Thresholds?	**Yes**/No	No/NA	No/No	NA

Maximum Quarterly Emissions: Based on construction schedule information provided and default assumptions contained in the CalEEMod computer model. On-site exhaust PM_{10} emissions were compared to SLOAPCD's DPM threshold. Totals may not sum due to rounding. Refer to Appendix C for modeling assumptions and results.

1. *Maximum quarterly emissions include on-site and off-site emissions.*
2. *Reflects PM_{10} exhaust for diesel-fueled equipment for comparison to SLOAPCD's DPM thresholds.*

Table 10. Summary of Construction Emissions Without Mitigation

Criteria	Project Emissions	SLOAPCD Significance Threshold		Exceeds Significance Threshold?	
Maximum Daily Emissions of ROG+NO_X	210.39 lbs/day	137 lbs/day		**Yes**	
Maximum Daily Emissions of DPM	3.69 lbs/day	7 lbs/day		No	
		Tier 1	**Tier 2**	**Tier 1**	**Tier 2**
Maximum Quarterly Emissions of ROG+NO_X	4.46 tons/qtr.	2.5 tons/qtr.	6.3 tons/qtr.	**Yes**	No
Maximum Quarterly Emissions of DPM	0.06 tons/qtr.	0.13 tons/qtr.	0.32 tons/qtr.	No	No
Maximum Quarterly Emissions of Fugitive PM	0.96 tons/qtr.	2.5 tons/qtr.	None	No	No
Refer to Appendix C for modeling assumptions and results.					

Mitigation Measures

AQ-1: The following measures shall be implemented to reduce construction generated mobile-source and evaporative emissions:

a. Maintain all construction equipment in proper tune according to manufacturer's specifications.
b. Fuel all off-road and portable diesel-powered equipment with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road).
c. Diesel-fueled construction equipment shall meet, at a minimum, ARB's Tier 3, or newer, certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State Off-Road Regulation. Heavy-duty off-road equipment meeting Tier 4 emissions standards shall be used to the extent locally available.
d. Use on-road heavy-duty trucks that meet the ARB's 2010, or cleaner, certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation.
e. Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NOx exempt area fleets) may be eligible by proving alternative compliance.
f. Electrify equipment when feasible.
g. Substitute gasoline-powered in place of diesel-powered equipment, where feasible.
h. Use alternative-fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.
i. When applicable, portable equipment, 50 horsepower (hp) or greater, used during construction activities shall be registered with the California statewide portable equipment registration program (issued by the California Air Resources Board) or be permitted by the APCD. Such equipment may include power screens, conveyors, internal combustion engines, crushers, portable generators, tub grinders, trammel screens, and portable plants (e.g., aggregate plant, asphalt plant, concrete plant). For more information, contact the SLOAPCD Engineering & Compliance Division at (805) 781-5912.
j. Construction of the proposed project shall use low-VOC content paints not exceeding 50 grams per liter.
k. To the extent locally available, use prefinished building materials or materials that do not require the application of architectural coatings.
l. The following idling restrictions near sensitive receptors for both on- and off-road equipment shall be implemented:
    1) Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
    2) Diesel idling within 1,000 feet of sensitive receptors is not permitted;
    3) Use of alternative fueled equipment is recommended whenever possible; and,
    4) Signs that specify the no-idling requirements must be posted and enforced at the construction site.
m. On-road vehicle operations shall comply with Section 2485 of Title 13, the California Code of Regulations limits diesel-fueled commercial motor vehicles that operate in the State of California with gross vehicular weight ratings of greater than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles:

1) Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and,
2) Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 100 feet of a restricted area, except as noted in Subsection (d) of the regulation.
3) Signs must be posted in the designated queuing areas and job sites to remind drivers of the 5-minute idling limit. The specific requirements and exceptions in the regulation can be reviewed at the following web site: www.arb.ca.gov/msprog/truck-idling/2485.pdf.

n. Off-road diesel equipment shall comply with the 5-minute idling restriction identified in Section 2449(d)(3) of the California Air Resources Board's In-Use Off-Road Diesel regulation available at: www.arb.ca.gov/regact/2007/ordiesl07/frooal.pdf.
o. Signs shall be posted in the designated queuing areas and job sites to remind on-road and off-road equipment operators of the 5-minute idling limit.

AQ-2: The following measures shall be implemented to reduce construction generated fugitive dust. These measures shall be shown on grading and building plans:

a. Reduce the amount of disturbed area where possible.
b. Use water trucks, APCD approved dust suppressants (see Section 4.3 in the CEQA Air Quality Handbook), or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site and from exceeding the District's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible. Please note that since water use is a concern due to drought conditions, the contractor or builder shall consider the use of an APCD-approved dust suppressant where feasible to reduce the amount of water used for dust control. For a list of suppressants, see Section 4.3 of the CEQA Air Quality Handbook.
c. All dirt stockpile areas should be sprayed daily as needed.
d. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities;
e. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established.
f. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the SLOAPCD.
g. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
h. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.
i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between the top of load and top of trailer) in accordance with CVC Section 23114.
j. Install wheel washers at the construction site entrance/exit, wash off the tires or tracks of all trucks and equipment leaving the site, or implement other SLOAPCD-approved track-out prevention devices sufficient to minimize the track-out of soil onto paved roadways.
k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.
l. The burning of vegetative material shall be prohibited. Effective February 25, 2000, the APCD prohibited developmental burning of vegetative material within San Luis Obispo County. If you have any questions regarding these requirements, contact the SLOAPCD Engineering & Compliance Division at (805) 781-5912.
m. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20% opacity, and to prevent the transport of dust off-site. Their duties shall include holidays and weekend periods when work may not be in progress.

The name and telephone number of such persons shall be provided to the SLOAPCD Compliance Division prior to the start of any grading or earthwork.

Significance After Mitigation

Implementation of Mitigation Measures AQ-1 and AQ-2 include SLOAPCD-recommended standard mitigation measures and best-available control technology for construction-generated emissions of fugitive dust, as well as mobile-source emissions associated with construction equipment and vehicles. Depending on the availability of Tier 4 off-road equipment, on-site emissions could be reduced by up to approximately 50 percent for ROG, 80 percent for NO_X, and 90 percent for DPM, in comparison to off-road equipment meeting Tier 3 emission standards. Implementation of dust control measures would reduce fugitive dust emissions by approximately 50 percent, or more. Additional measures have also been included to reduce evaporative emissions from architectural coasting, including the use of low VOC-content paint and prefinished construction materials. Together these measures would assist with the compliance of SLOAPCD's 20-percent opacity limit (APCD Rule 401), nuisance rule (APCD Rule 402), and minimize potential nuisance impacts to nearby receptors. Mitigated emissions would be reduced and would not exceed SLOAPCD's daily or quarterly Tier 2 significance thresholds. For project's exceeding Tier 1 significance thresholds, the SLOAPCD considers implementation of standard mitigation measures and best-available control technology to be sufficient to reduce short-term air quality impacts to a less-than-significant level. With mitigation, this impact would be considered ***less than significant.***

Table 11. Summary of Construction Emissions With Mitigation

Criteria	Project Emissions	SLOAPCD Significance Threshold		Exceeds Significance Threshold?	
Maximum Daily Emissions of ROG+NO_X	121.33 lbs/day	137 lbs/day		No	
Maximum Daily Emissions of DPM	3.11 lbs/day	7 lbs/day		No	
		Tier 1	**Tier 2**	**Tier 1**	**Tier 2**
Maximum Quarterly Emissions of ROG+NO_X	3.02 tons/qtr.	2.5 tons/qtr.	6.3 tons/qtr.	**Yes**	No
Maximum Quarterly Emissions of DPM	0.09 tons/qtr.	0.13 tons/qtr.	0.32 tons/qtr.	No	No
Maximum Quarterly Emissions of Fugitive PM	0.88 tons/qtr.	2.5 tons/qtr.	None	No	No

Includes the use of Tier 3 off-road equipment, implementation of fugitive dust control measures, and low-VOC content paint.
Refer to Table 12 for mitigated quarterly emissions.
Refer to Appendix C for modeling assumptions and results.

Table 12. Quarterly Construction Emissions With Mitigation

Quarter	Maximum Quarterly Emissions (tons)[1]			
	ROG+NO_X[2]	PM_{10}		
		Fugitive	Exhaust[3]	Total
Year 2023 - Quarter 1	1.05	0.18	0.05	0.23
Year 2023 - Quarter 2	1.08	0.25	0.05	0.30
Year 2023 - Quarter 3	1.00	0.12	0.04	0.16
Year 2023 - Quarter 4	0.98	0.12	0.04	0.16
Year 2024 - Quarter 1	2.28	0.78	0.06	0.84
Year 2024 - Quarter 2	2.52	**0.88**	0.06	0.95
Year 2024 - Quarter 3	2.52	**0.88**	0.06	0.95
Year 2024 - Quarter 4	2.56	0.86	0.06	0.93
Year 2025 - Quarter 1	2.52	0.86	0.06	0.93
Year 2025 - Quarter 2	2.48	**0.88**	0.04	0.95
Year 2025 - Quarter 3	2.48	**0.88**	0.06	0.95
Year 2025 - Quarter 4	2.48	0.86	0.06	0.93
Year 2026 - Quarter 1	2.51	0.87	**0.09**	0.97
Year 2026 - Quarter 2	2.92	**0.88**	**0.09**	**0.98**
Year 2026 - Quarter 3	2.92	**0.88**	**0.09**	**0.98**
Year 2026 - Quarter 4	**3.02**	0.87	**0.09**	0.96
Year 2027 - Quarter 1	2.42	0.86	0.06	0.93
Year 2027 - Quarter 2	2.40	**0.88**	0.06	0.95
Year 2027 - Quarter 3	2.40	**0.88**	0.06	0.95
Year 2027 - Quarter 4	2.42	0.86	0.06	0.93
Year 2028 - Quarter 1	2.39	0.86	0.06	0.93
Year 2028 - Quarter 2	2.36	**0.88**	0.06	0.95
Year 2028 - Quarter 3	2.36	**0.88**	0.05	0.95
Year 2028 - Quarter 4	2.39	0.86	0.06	0.93
Year 2029 - Quarter 1	2.35	0.86	0.06	0.93
Year 2029 - Quarter 2	2.33	**0.88**	0.06	0.95
Year 2029 - Quarter 3	2.33	**0.88**	0.06	0.95
Year 2029 - Quarter 4	2.29	0.85	0.06	0.91
Year 2030 - Quarter 1	1.96	0.80	0.04	0.85
Year 2030 - Quarter 2	2.04	0.82	0.05	0.87
Year 2030 - Quarter 3	2.04	0.82	0.05	0.87
Year 2030 - Quarter 4	1.96	0.80	0.04	0.85
SLOAPCD Quarterly Tier 1/Tier 2 Thresholds (tons/quarter)	**2.5/6.3**	**2.5/None**	**0.13/0.32**	**None**
Maximum Quarterly Emissions:	3.02	0.88	0.09	0.98
Exceed SLOAPCD Tier 1/Tier 2 Thresholds?	**Yes**/No	No/NA	No/No	NA

Maximum Quarterly Emissions: Based on construction schedule information provided and default assumptions contained in the CalEEMod computer model. On-site exhaust PM_{10} emissions were compared to SLOAPCD's DPM threshold. Totals may not sum due to rounding. Refer to Appendix C for modeling assumptions and results.

1. Maximum quarterly emissions include on-site and off-site emissions.

2. Includes use of Tier 3 off-road equipment, fugitive dust control measures, and use of low VOC paints (50g/L, or less) . 3. Reflects PM_{10} exhaust for diesel-fueled equipment for comparison to SLOAPCD's DPM thresholds

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 associated with the proposed project are summarized in Table 13. As shown, maximum daily operational emissions of ROG+NO_x would total approximately 182.7 lbs/day and 115.8 lbs/day of fugitive PM_{10}. Daily emissions of ROG+NO_x and fugitive PM_{10} would exceed SLOAPCD's corresponding significance thresholds. Annual emissions of ROG+NO_x would total approximately 29.7 tons/year and fugitive PM_{10} would total approximately 17.6 tons/year. Emissions would be predominantly associated with the operation of motor vehicles. Estimated annual operational emissions would exceed SLOAPCD's recommended significance thresholds. As a result, this impact would be considered **potentially significant**.

Table 13. Operational Emissions Without Mitigation

Operational Period/Source	Emissions[1]						
	ROG	NO_X	ROG+NO_X	CO	PM_{10}		
					Fugitive	Exhaust	Total
Daily Emissions (lbs/day)							
Area Source	57.3	1.4	58.7	118.8	0	0.7	0.7
Energy Use	1.0	8.5	9.5	4.2	0	0.7	0.7
Mobile	53.1	61.3	114.4	468.6	115.8	0.8	116.6
Total Project Emissions	111.4	71.2	182.7	591.7	115.8	2.1	117.9
SLOAPCD Significance Thresholds	**--**	**--**	**25**	**550**	**25**	**1.25**	**--**
Exceeds SLOAPCD Thresholds?	--	--	**Yes**	**Yes**	**Yes**	**Yes**	--
Annual Emissions (tons/year)							
Total Project Emissions	18.5	11.3	29.7	91.1	17.6	0.4	17.9
SLOAPCD Significance Thresholds	**--**	**--**	**25**	**--**	**25**	**--**	**--**
Exceeds SLOAPCD Thresholds?	--	--	**Yes**	--	No	--	--

Note: Based on operational year of 2030 for Hotel, Commercial & Educational, and Residential. Totals may not sum due to rounding. Refer to Appendix C for modeling output files and assumptions.

1. *Daily emissions are based on the highest emissions for summer or winter operational conditions for buildout conditions. Totals may not sum due to rounding. Refer to Appendix C for modeling output files and assumptions.*

Mitigation Measures

AQ-3: The following mitigation measures shall be implemented, to the extent possible, to minimize long-term operational emissions:

a. Install electric fireplace in place of US EPA-certified Tier 2 residential wood burning appliances.
b. 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. Features may include: appropriate signalization and signage; safe routes to school; linking cul-de-sacs and dead ends; orienting buildings toward streets with automobile parking in the rear, etc.
c. For all commercial and multi-family residential land uses, provide shade (e.g. through tree planting or built structures) over 50 percent of parking spaces to reduce evaporative emissions from parked vehicles, excluding areas where increased shade would affect the performance of solar PV systems.
d. Reduce fugitive dust from roads and parking areas with the use of paving or other materials.
e. Implement driveway design standards (e.g., speed bumps, curved driveway) for self-enforcement of reduced speed limits on unpaved driveways.

f. Use an SLOAPCD-approved suppressant on private unpaved roads leading to the site, unpaved driveways and parking areas applied at a rate and frequency that ensures compliance with SLOAPCD Rule 401: Visible Emissions, and ensures off-site nuisance impacts do not occur.
g. Incorporate traffic calming modifications to project roads to reduce vehicle speeds and increase pedestrian and bicycle usage and safety.
h. Work with SLOCOG to create, improve, or expand an onsite or nearby 'Park and Ride' lot with car parking and bike lockers in proportion to the size of the project. The Park and Ride lot proposed as part of the Dana Reserve Specific Plan could meet the requirements of this measure, if upon review of final design plans, the County and SLOCOG concur that the onsite lot is in proportion to the size of the Dana Reserve Specific Plan project.
i. Implement on-site circulation design elements in parking lots to reduce vehicle queuing and improve the pedestrian environment.
j. Provide future commercial land uses to provide employee lockers and showers to promote bicycle and pedestrian use. One shower and 5 lockers for every 25 employees is recommended.
k. Increase bicycle accessibility and safety in the vicinity of the project; for example: provide interconnected bicycle routes/lanes or construction of bikeways.
l. Provide 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.
m. If the project is located on an established transit route, provide improved public transit amenities (e.g.: covered transit turnouts, direct pedestrian access, bicycle racks, covered bench, smart signage, route information displays, lighting, etc.).
n. Encourage commercial land uses to provide a bicycle-share program.
o. Require 15 percent of fleet vehicles owned by commercial land uses to be zero-emission vehicles. This requirement shall apply to commercial land uses and fleets based onsite within the Specific Plan area and not on a larger scale for commercial operations that occur at multiple locations.
p. Encourage neighborhood electric vehicles/car-share program for the development.
q. Provide dedicated parking for carpools, vanpools, and/or high-efficiency vehicles to exceed by 20% Cal Green Tier 2 for non-residential land uses.
r. Work with SLO Regional Rideshare to educate occupants with alternative transportation and smart commute information (e.g., transportation board, electronic kiosk, new hire packets, web portal, newsletters, social media, etc.).
s. Encourage non-residential land uses to implement and promote programs to reduce employee vehicle miles traveled (e.g. incentives, SLO Regional Rideshare trip reduction program, vanpools, on-site employee housing, alternative schedules (e.g. 9–80s, 4–10s, telecommuting, satellite work sites, etc.).
t. At community event centers (i.e., amphitheaters, theaters, and stadiums), shall provide free valet bicycle parking.
u. Exceed by 20% applicable building standards at the time of development for providing electric vehicle charging infrastructure.
v. Exceed by 20% applicable building standards at the time of development for building energy efficiency with a goal of achieving zero net energy (ZNE) buildings.
w. Implement a "No Idling" vehicle program which includes signage enforcement, etc.
x. Exceed by 20% applicable building standards at the time of development for utilizing recycled content materials.
y. Exceed by 20% applicable building standards at the time of development for reducing cement use in the concrete mix as allowed by local ordinance and conditions.
z. Exceed by 20% applicable building standards at the time of development for the use of greywater, rainwater, or recycled water.
aa. Exceed by 20% applicable building standards at the time of development for water conservation (e.g., use of low-flow fixtures, water-efficient irrigation systems, drought-tolerant landscaping).
bb. Exceed by 20% applicable building standards at the time of development for using shading, trees, plants, cool roofs, etc. to reduce the "heat island" effect.
cc. All built-in appliances shall comply with California Title 20, Appliance Efficiency Regulation.
dd. Utilize on-site renewable energy systems (e.g. solar, wind, geothermal, biomass and/or biogas) sufficient to exceed by 20% applicable building standards at the time of development with a goal of achieving zero net energy (ZNE) buildings.
ee. Design roof trusses to handle dead weight loads of standard solar-heated water and photovoltaic panels.

Significance After Mitigation

Implementation of Mitigation Measure AQ-3 includes SLOAPCD-recommended mitigation measures. Additional mitigation measures have also been included to further reduce operational emissions. The project also incorporates CAPCOA-recommended VMT reductions strategies within its site design. However, the effectiveness of the design features in reducing VMT and emissions from mobile sources is uncertain (CCTC 2021). Mitigated operational emissions associated with the proposed project are summarized in Table 14. With implementation of Mitigation Measures AQ-3, operational annual emissions would be reduced to below SLOAPCD's significance threshold. However, daily emissions would exceed SLOAPCD's significance threshold. Therefore, this impact would be considered ***significant and unavoidable***.

Table 14. Operational Emissions With Mitigation

Operational Period/Source	Emissions						
	ROG	NO_X	ROG+NO_X	CO	PM_{10}		
					Fugitive	Exhaust	Total
Daily Emissions (lbs/day)							
Total Project Emissions	106.8	62.5	169.3	529.0	95.1	1.7	97.0
SLOAPCD Significance Thresholds	**--**	**--**	**25**	**550**	**25**	**1.25**	**--**
Exceeds SLOAPCD Thresholds?	--	--	**Yes**	**Yes**	**Yes**	**Yes**	--
Annual Emissions (tons/year)							
Total Project Emissions	17.7	9.9	27.6	81.6	14.5	0.3	14.8
SLOAPCD Significance Thresholds	**--**	**--**	**25**	**--**	**25**	**--**	**--**
Exceeds SLOAPCD Thresholds?	--	--	**Yes**	--	No	--	--

Note: Based on operational year of 2030 for Hotel, Commercial & Educational, and Residential. Totals may not sum due to rounding. Refer to Appendix C for modeling output files and assumptions.

Impact AQ-C. Expose sensitive receptors to substantial pollutant concentrations?

The proposed project would result in localized increases of pollutant concentrations during project construction and long-term operation. The proposed project's potential contribution to localized air pollutants is discussed, as follows:

Short-Term Construction Activities

Naturally-Occurring Asbestos

Naturally-occurring asbestos (NOA) has been identified as a toxic air contaminant by the ARB. NOA has not been identified on the project site. In accordance with ARB Air Toxics Control Measure (ATCM), 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 SLOAPCD. If NOA is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM.

Based on a review of the SLOAPCD's map depicting potential areas of NOA, the project site is located in the vicinity of areas that have a potential for NOA (refer to Appendix B). As a result, there is a potential for NOA to be discovered during the grading process. As a result, this impact would be considered ***potentially significant***.

Localized Construction PM Concentrations

Fugitive dust emissions would be primarily associated with site preparation, grading, and vehicle travel on unpaved and paved surfaces. On-site off-road equipment and trucks would also result in short-term emissions of diesel-exhaust PM, which could contribute to elevated localized concentration at nearby receptors. Uncontrolled emissions of fugitive dust may also contribute to potential increases in nuisance impacts to

nearby receptors. For these reasons, localized uncontrolled concentrations of construction-generated PM would be considered to have a ***potentially significant impact.***

Long-term Operations

Localized Operational DPM Concentrations

Implementation of the proposed project is not anticipated to result in significant increases in localized DPM concentrations associated with on-site operational activities. However, some planned land uses may include the installation of stationary sources of emissions, such as diesel-fueled backup power generators, which may be subject to SLOAPCD permitting requirements. In addition, the project site is located adjacent to U.S. Highway 101. Heavy-duty diesel trucks traveling along U.S. Highway 101may result in localized DPM concentrations that could adversely impact on-site sensitive land uses.

In 2005, ARB release an *Air Quality and Land Use Handbook* that recommended not siting sensitive land uses within 500 feet of major freeways. DPM concentrations are typically strongest within 300 feet of the freeway and decrease by roughly 70 percent at 500 feet. In some cases, measures can be implemented to help reduce potential impacts to DPM originating from major roadways, such as the installation of vegetative barriers. Other measures also include the installation of indoor high-efficiency (HE) filtration systems to reduce indoor concentrations. However, the effectiveness of these measures at reducing DPM concentrations can vary widely depending on multiple factors. For instance, the effectiveness of vegetative barriers is dependent, in part, on the density, height, and type of vegetation, as well as the life expectancy of the vegetation. The effectiveness of HE filtration systems also varies widely depending on the type of system installed. HE filtration systems are most effective during periods when the units are operating and with windows closed.

As currently proposed, a majority of the planned future residential development would be located in excess of 500 feet from U.S. Highway 101. The planned future childcare center would also be located in excess of 500 feet of U.S. Highway 101.However, a small portion of planned multi-family residential located within the southeastern portion of the project site could be located within 500 feet of U.S. Highway 101. As a result, there is a potential for multi-family and cluster residential dwellings to be located within 500 feet of U.S. Highway 101. Depending on the land uses ultimately developed, other sensitive land uses, such as childcare centers, could also be located within planned future commercial areas. As a result, this impact would be considered ***potentially significant***.

Figure 2. 500-Foot Setback from U.S. Highway 101

Not to scale.

Localized Operational CO 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) E or F. With implementation of the proposed project, the signalized intersections at W Tefft Street/U.S. Highway 101 South Bound Ramps would continue to operate at LOS F (CCTC 2021). However, planned widening projects and an additional interchange are in progress to bring the intersection to an acceptable LOS (CCTC 2021). As a result, implementation of the proposed project would not be anticipated to result in or contribute to localized CO concentrations that would exceed applicable ambient air quality standards. This impact is considered **less than significant**.

Mitigation Measures

AQ-4: Prior to any grading activities, a geologic evaluation shall be conducted to determine if naturally occurring asbestos (NOA) is present within the area that will be disturbed. If NOA is not present, an exemption request must be filed with the SLOAPCD. If NOA is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM. These requirements may include but are not limited to:

a. Development of an Asbestos Dust Mitigation Plan which must be approved by the SLOAPCD before operations begin, and,
b. Development and approval of an Asbestos Health and Safety Program (required for some projects).

AQ-5: The following mitigation measures shall be implemented to reduce long-term exposure to localized pollutant concentrations:

a. Sensitive land uses including, but not limited to, residential dwellings, childcare facilities, and convalescent care facilities, shall be oriented as far from U.S. Highway 101 as possible and shall not be located within 500 feet of the edge of pavement of U.S. Highway 101 (refer to Figure 2 of this report). In the event future development proposals include sensitive land uses within the 500-foot buffer from U.S. Highway 101, those sensitive land uses shall be disallowed unless a detailed Health Risk Assessment, approved by the County and the San Luis Obispo Air Pollution Control District, documents that health risks associated with proximity to U.S. Highway 101 would be within acceptable thresholds in effect at the time development is proposed.

Significance After Mitigation

Mitigation Measures AQ-4 would ensure compliance with applicable regulatory requirements pertaining to exposure to naturally-occurring asbestos. implementation of Mitigation Measures AQ-5 would prohibit development of sensitive land uses within 500 feet of U.S. Highway 101 in accordance with ARB-recommended guidance. Furthermore, implementation of Mitigation Measure AQ-1 and AQ-2 also include numerous measures that would substantially reduce localized emissions of PM emitted during project construction. 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. In addition, no known odor sources are within one mile of the project site. 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. Mitigation measures, such as implementation of idling restrictions for construction equipment and vehicles and use of newer, cleaner equipment and vehicles would further reduce construction-generated emissions. For these reasons, 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 87percent 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, adipic 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 120 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_6F1_4). 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. Nitrogen trifluoride 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 Assembly Bill (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 particulate matter (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 weighs 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 15 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, Methane 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 Nitrogen trifluoride, Sulfur hexafluoride, Perfluorocarbons, and black carbon.

Table 15. Global Warming Potential for GHGs

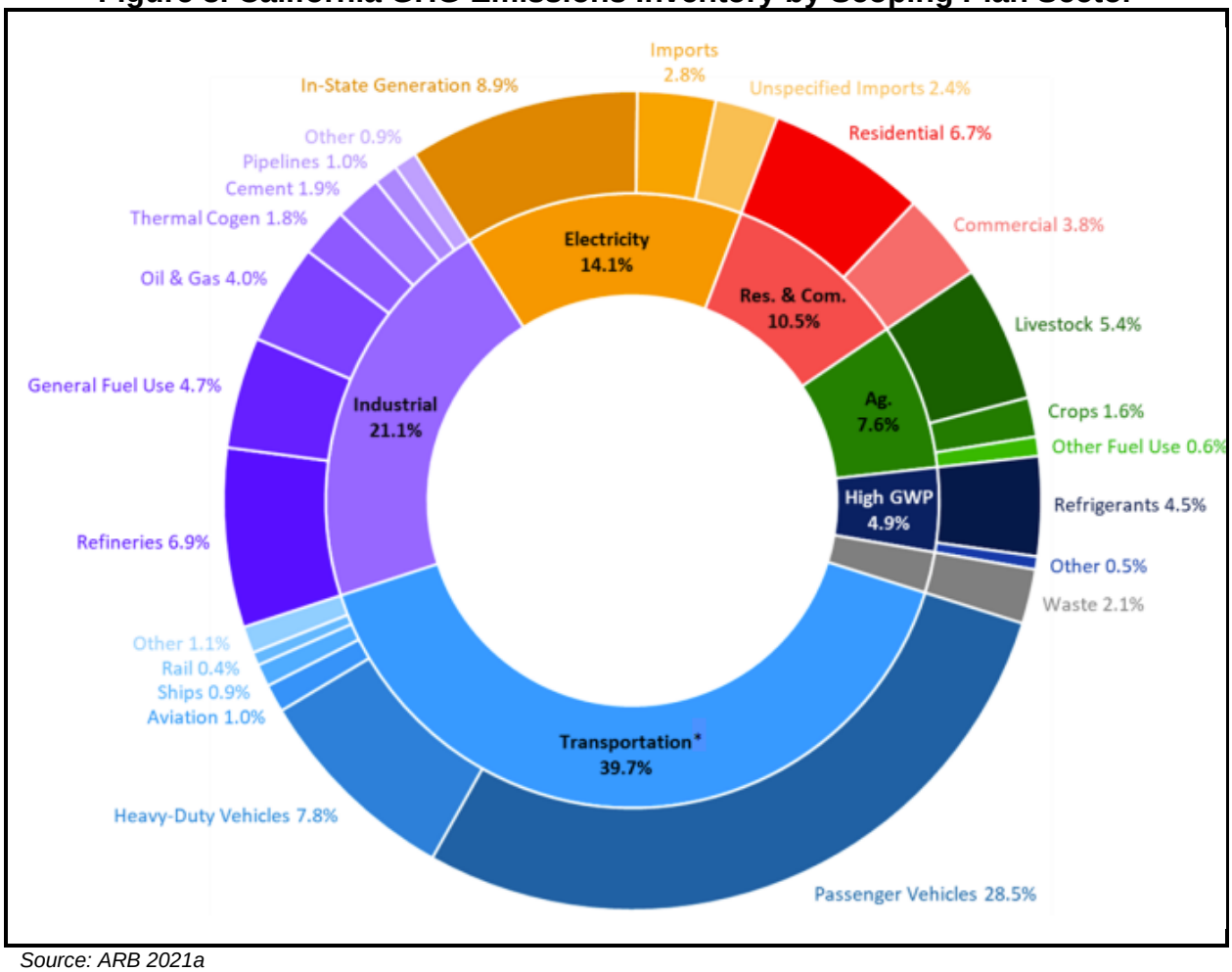
< Greenhouse Gas	< Global Warming Potential (100-year)
Carbon Dioxide (CO_2)	1
Methane (CH_4)	25
Nitrous Dioxide (N_2O)	298
**Based on IPCC GWP values for a 100-year time horizon* *Source: IPCC 2007*	

Sources of 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 3. California GHG Emissions Inventory by Scoping Plan Sector



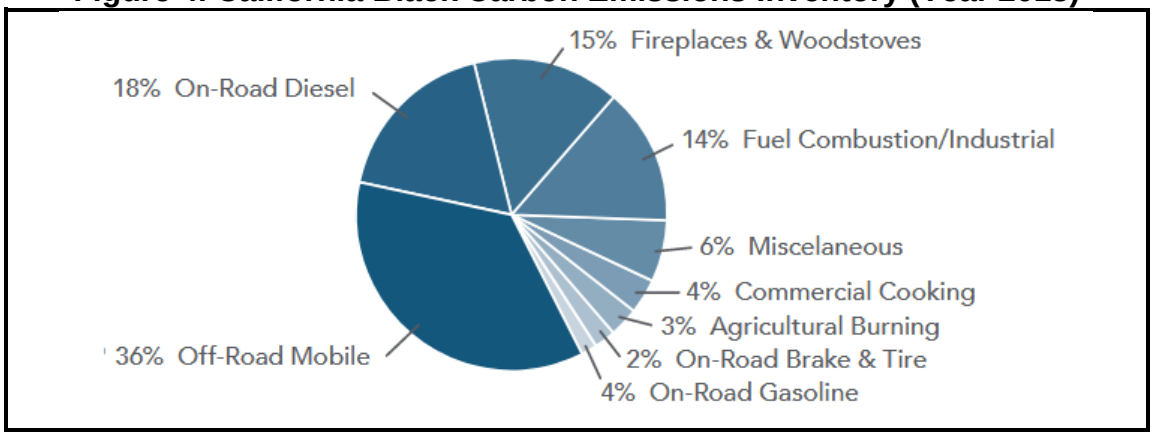
Source: ARB 2021a

Short-Lived Climate Pollutants

Short-lived climate pollutants (SLCPs), such as black carbon, fluorinated gases, and methane 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 4. 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 2012).

Figure 4. California Black Carbon Emissions Inventory (Year 2013)



Source: ARB 2020

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.

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 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 (2007), 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 the 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 was 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.

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 NO. 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 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 NO. N-79-20

Executive Order N-79-20 (State of California) calls to accelerate the transition away from fossil fuels by requiring all new cars sold in California to be zero-emission by 2035, all new commercial trucks sold in the state to be zero-emission by 2045 for all operations where feasible, and all new off-road vehicles and equipment sold to be zero-emission by 2035 where feasible. EO N-79-20 reaffirms the state's commitment to implementing EO N-19-19.

Executive Order N-79-20 reiterates the message of EO N-19-19 by highlighting three strategies to expand clean transportation options from the Climate Action Plan for Transportation Infrastructure, while also emphasizing the importance of CAPTI and the urgency of climate change. Executive Order N-79-20 furthers the state's climate goals by explicitly pointing to the critical role of transit, passenger rail, active transportation, Complete Streets, and micromobility as tools to expand mobility options, encourage mode shift, and reduce overall vehicle miles traveled (VMT).

ASSEMBLY BILL 32 - CALIFORNIA GLOBAL WARMING SOLUTIONS ACT OF 2006

AB 32 (Health and Safety Code Sections 38500, 38501, 28510, 38530, 38550, 38560, 38561–38565, 38570, 38571, 38574, 38580, 38590, 38592–38599) requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. The gases that are regulated by AB 32 include CO_2, CH_4, N_2O, HFCs, PFCs, NF_3, and SF_6. The reduction to 1990 levels will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs ARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles.

However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then ARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires that ARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap, institute a schedule to meet the emissions cap, and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves reductions in GHG emissions necessary to meet the cap. AB 32 also includes guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

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 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 on November 2017. The *2017 Climate Change Scoping Plan* incorporates strategies for achieving the 2030 GHG-reduction target established in SB 32 and EO 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.

SENATE BILL 1078 AND GOVERNOR'S ORDER S-14-08

Senate Bill 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 20 percent of their supply from renewable sources by 2017. This Senate Bill will affect statewide GHG emissions associated with electricity generation. In 2008, Governor Schwarzenegger signed Executive Order S-14-08, which set the Renewables Portfolio Standard 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. Executive Order S-14-08 was later superseded by Executive Order S-21-09 on September 15, 2009. Executive Order S-21-09 directed the ARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. Statute SB X1-2 superseded this Executive Order 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.

ARB is required by current law, AB 32 of 2006, to regulate sources of GHGs to meet a state goal of reducing GHG emissions to 1990 levels by 2020 and an 80 percent reduction of 1990 levels by 2050. The California Energy Commission and California Public Utilities Commission serve in advisory roles to help ARB develop the

regulations to administer the 33 percent by 2020 requirement. ARB is also authorized to increase the target and accelerate and expand the time frame.

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

Senate Bill 97 (SB 97) was enacted in 2007. SB 97 required OPR 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

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 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 California Building Code 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 California Building Code 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.

AB 32, which mandates the reduction of GHG emissions in California to 1990 levels by 2020, increased the urgency around the adoption of green building standards. In its scoping plan for the implementation of AB 32, ARB identified energy use as the second largest contributor to California's GHG emissions, constituting roughly 25 percent of all such emissions. In recommending a green building strategy as one element of the scoping plan, ARB estimated that green building standards would reduce GHG emissions by approximately 26 MMT of CO_2e by 2020.

The green buildings standards were most recently updated on May 2018. Referred to as the *2019 Building Energy Efficiency Standards*, this most recent update 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. The recently updated *2019 Building Energy Efficiency Standards* also require new homes built after January 1, 2020 to be equipped with solar photovoltaic (PV) systems. The solar PV systems are to be sized based on the buildings annual electricity demand, the building square footage, and the climate zone within which the home is located. However, under the *2019 Building Energy Efficiency Standards,* homes may still rely on other energy sources, such as natural gas. Compliance with the *2019 Building Energy Efficiency Standards,* including the solar PV system mandate, residential dwellings will use approximately 50 to 53 percent less energy than those under the 2016 standards. Actual reduction will vary depending on various factors (e.g., building orientation, sun exposure). Non-residential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2019).

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 hydrofluorocarbon (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 2017).

SAN LUIS OBISPO COUNTY AIR POLLUTION CONTROL DISTRICT

The SLOAPCD is a local public agency with the primary mission of realizing and preserving clean air for all county residents and businesses. Responsibilities of the SLOAPCD 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.

Impact Analysis

Thresholds of Significance

In accordance with Appendix G of the *State CEQA Guidelines,* increased GHG emissions associated with the implementation of the proposed project would be considered significant if it would:

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

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

The SLOAPCD has not adopted recommended GHG significance thresholds. Thresholds should be based on AB 32 GHG emission reduction goals for year 2020. The SLOAPCD-recommended thresholds have not yet been updated to address year 2030 GHG-reduction targets, per SB 32.

The County of San Luis Obispo has not adopted a Qualified Greenhouse Gas Reduction Strategy that is specifically applicable to the project. Consistency with year 2030 GHG reductions, per SB32, and the State's currently adopted Scoping Plan have been evaluated using an efficiency threshold. The GHG-efficiency threshold was calculated by dividing the GHG emissions inventory goal (allowable emissions), by the estimated service population (SP). The efficiency threshold was based on ARB's GHG emissions inventory identified in the currently adopted *2017 Scoping Plan Update*. Emissions sectors that do not apply to the proposed project (i.e., industrial, agriculture) were excluded from the calculation. The GHG emissions inventory for the land use sectors applicable to the proposed project were then divided by the projected SP

for future year 2030. The SP was calculated based on the most current population and employment projections derived from the California Department of Finance Demographic Research Unit and California Employment Development Department, respectively. The methodology used for quantification of the target efficiency threshold applied to the proposed project is summarized in Table 16. Accordingly, project-generated GHG emissions that would exceed the efficiency threshold of 3.4 $MTCO_2e$/SP/year in 2030 would be considered to have a potentially significant impact on the environment that could conflict with GHG-reduction planning efforts. To be conservative, amortized construction-generated GHG emissions were included in annual operational GHG emissions estimates.

Table 16. SB 32 Greenhouse Gas Thresholds of Significance

Operational Year	2030
Land Use Sectors GHG Emissions Target[1]	213,000,000
Population[2]	41,860,549
Employment[3]	20,729,820
Service Population (SP)	62,590,369
GHG Efficiency Threshold ($MTCO_2e$/SP/yr)	3.4

Note: Employment data for interim years are estimated based on proportionality with population trends based on historical data.
Based on AB 32 Scoping Plan's land use inventory sectors for years 2023 and 2030; Includes transportation sources.
1. Based on ARB 2017 Climate Scoping Plan Update/SB 32 Scoping Plan Emissions Sector targets.
2. California Department of Finance Demographic Research Unit. 2019. Report P-1 "State Population Projections (2010 - 2060)" (DOF, 2019).
3. California Employment Development Department. Employment Projections Labor Market Information Resources and Data, "CA Long-Term. 2018-2028 Statewide Employment Projections". Projected year 2030 employment data was projected based on the average-annual increase for years 2018 through 2028.

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 for project development Construction of this project anticipated to occur over an approximately 96-month period beginning in 2023. Off-road equipment was based on CalEEMod defaults. Additional construction information, such as worker vehicle trips and equipment load factors, were not available and were based on default parameters contained in the model. Construction emissions were amortized based on an estimated project life of 25 years and included with operational emissions for determination of impact significance. 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 for year 2030 operational conditions. 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 (CCTC 2021). Vehicle travel distribution/distances were not available and were based on model defaults for San Luis Obispo County. Emission modeling files are provided in Appendix C.

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?

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 17. Based on the modeling conducted, construction-related GHG emissions would total approximately 29,618.8 $MTCO_2e$. Amortized GHG emissions, when averaged over the assumed 30-year life of the project, would total approximately 987.3 $MTCO_2e$/year. There would also be a small amount of GHG emissions from waste generated during construction; however, this amount is speculative. 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 17. Construction-Generated GHG Emissions Without Mitigation

Construction Year	GHG Emissions ($MTCO_2e$/Year)
2023	747.5
2024	4,323.0
2025	4,311.1
2026	4,558.1
2027	4,159.7
2028	4,075.3
2029	4,009.3
2030	3,434.7
Construction Total:	29,618.8
Amortized Construction Emissions:	987.3

Amortized emissions are quantified based on a minimum 30-year project life. Refer to Appendix C for modeling assumptions and results.

Long-term Operational GHG Emissions

Estimated long-term increases in GHG emissions associated with the proposed project (without mitigation) for operational year 2030 are summarized in Table 18. As depicted, operational GHG emissions, with the inclusion of amortized construction GHGs, would total approximately 18,077.5 $MTCO_2e$/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 the modeling conducted and assuming a total service population of 4,828 individuals (i.e., 4,555 residents and 273 employees), the calculated GHG efficiency for the proposed project would be 3.7 $MTCO_2e$/SP/yr, which would exceed the significance thresholds of 3.4 $MTCO_2e$/SP/yr. As a result, this impact would be considered **potentially significant**.

Table 18. Operational GHG Emissions Without Mitigation

Operational Year/Source	GHG Emissions ($MTCO_2e$/Year)
	Year 2030
Area Source[1]	32.9
Energy Use[2]	2,477.3
Motor Vehicles[3]	14,042.3
Waste[4]	368.2
Water[5]	169.6
Total Operational Emissions:	17,090.2
Amortized Construction Emissions:	987.3
Total with Amortized Construction Emissions:	18,077.5
Service Population (SP)[6]:	4,828
MTCO2e/SP:	3.7
GHG Efficiency Significance Threshold:	**3.4**
Exceeds Threshold?	**Yes**

1. Area source includes emissions associated primarily with the use of landscape maintenance equipment.
2. Includes adjustment for California Renewable Portfolio Standards requirements and a minimum average reduction of 70 percent in residential electricity use with installation of on-site residential solar PV systems and compliance with applicable building energy-efficiency standards (PG&E 2022). Does not include reduction for mitigated natural gas use.
3. Based on default fleet mix for land uses contained in CalEEMod for San Luis Obispo County.
4. Based on an average annual waste diversion/recycling rate of 50% based on statewide averages.
5. Incudes use of low-flow water fixtures and water-efficient irrigation systems, per current building code requirements.
6. Based on the estimated number of residents and employees served by the proposed project (SWCA 2021).
Refer to Appendix C for modeling assumptions and results.

Mitigation Measures

GHG-1. In addition to Air Quality Mitigation Measures AQ-2 and AQ-3, the following measures shall be implemented to reduce project-generated emissions of GHGs:

a. To the extent practical, the proposed project shall reuse and recycle construction waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).
   a. The servicing of residential development by natural gas shall be prohibited. To the extent possible, non-residential development shall install electrically-powered appliances and building mechanical equipment in place of natural-gas fueled equipment.
   b. Encourage future land uses to participate in Central Coast Community Energy as the electricity provider if it is an option that would be available at the time of occupancy.
   c. The Project shall provide organic waste pick up and shall provide the appropriate on-site enclosures consistent with County of San Luis Obispo requirements.
   b. The proposed project shall be designed to incorporate drought-resistant and native plants.
   c. The proposed project shall be designed to incorporate water-efficient irrigation systems.
   d. The proposed project shall be designed to incorporate low-flow water fixtures.
   e. The proposed project shall install high-reflectance roofing materials (e.g., EPA "Energy Star"-rated), to the extent practical, to reduce building heat absorption and summer energy costs.

The electrical systems for single-family homes shall be designed with sufficient capacity to accommodate Level 2 residential-use electric vehicle chargers.

Significance After Mitigation

Implementation of Mitigation Measure AQ-2 would include measures that would reduce short-term emissions of GHGs, including emissions of black carbon. Implementation of Mitigation Measure AQ-3 would include measures that would reduce long-term emissions of GHGs, including emissions associated with energy and motor vehicle use. Additional measures have been included to further reduce emissions associated with energy use and to ensure compliance with current building standards. 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. The installation of natural-gas fired appliance and building mechanical equipment within non-residential land uses would further reduce GHG emissions. In some instances, however, comparable electrified commercial equipment may not be available or practical, such as for backup emergency power generators. Pacific Gas & Electric Company (PG&E) has historically been the primary electricity provider within San Luis Obispo County.

Mitigated operational year 2030 GHG emissions are summarized in Table 19. As depicted, mitigated operational emissions would total approximately 14,911.3 $MTCO_2e$/year. With mitigation, the project's GHG efficiency would be reduced to approximately 3.0 $MTCO_2e$/SP/year, below the corresponding efficiency threshold of 3.4 $MTCO_2e$/SP/year for ensuring consistency with SB 32 GHG-reduction requirements. With mitigation, the proposed project would be considered to have a less-than-significant impact on the environment. With mitigation, this impact would be considered ***less than significant***.

Table 19. Operational GHG Emissions With Mitigation

Operational Year/Source	GHG Emissions ($MTCO_2e$/Year)
	Year 2030
Area Source[1]	32.9
Energy Use[2]	566.6
Motor Vehicles	11,272.9
Waste Generation[4]	368.2
Water Use and Conveyance[5]	169.6
Total Operational Emissions:	12,410.1
Amortized Construction Emissions:	987.3
Total with Amortized Construction Emissions:	13,397.4
Service Population[6] (SP):	4,828
MTCO2e/SP:	2.8
GHG Efficiency Significance Threshold:	**3.4**
Exceeds Threshold?	No

1. Area source includes emissions associated primarily with the use of landscape maintenance equipment.
2. Includes adjustment for California Renewable Portfolio Standards requirements and a minimum average reduction of 70 percent in residential electricity use with installation of on-site residential solar PV systems and compliance with applicable building energy-efficiency standards (PG&E 2022).
3. Based on default fleet mix for land uses contained in CalEEMod for San Luis Obispo County.
4. Based on an average annual waste diversion/recycling rate of 50% based on statewide averages.
5. Incudes use of low-flow water fixtures and water-efficient irrigation systems, per current building code requirements.
6. Based on the estimated number of residents and employees served by the proposed project (SWCA 2021).
Refer to Appendix C for modeling assumptions and results.

Impact GHG-B Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As noted in Table 16 and 17, operational GHG emissions attributable to the proposed project would be primarily associated with energy use and mobile sources, which account for roughly 14 percent and 79 percent of the project's total operational GHG emissions, respectively. Implementation of recommended mitigation measures and compliance with current building standards would significantly reduce GHG emissions associated with energy use, such that project-generated GHG emissions would not exceed statewide year 2030 GHG-reduction targets, per SB 32 requirements. In addition to the statewide GHG reductions established by SB 32, project consistency with the *County of San Luis Obispo 2019 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS)/SB 375 would also be required.

The 2019 RTP/SCS was adopted by the SLOCOG Board in June 2019. The SCS component outlines how the region will meet or exceed its GHG reduction targets as required by SB 375 through the promotion of a variety of transportation demand management & system management tools and techniques to maximize the efficiency of the transportation network. Consistency with the requirement of SB 375 ensures consistency with the GHG-reduction targets set by ARB. The 2019 SCS was found to be consistent with the requirement of SB 375 and is also consistent with the general plans of the region's jurisdictions (SLOCOG 2019).

Estimated regional average VMT modeling results, with and without project implementation, are summarized in Table 8. As depicted, regional average VMT/employee would decrease from 27.0 to 26.9 and VMT/capita would increase from 29.8 to 30.0 with project implementation. With project implementation, VMT would exceed the significance threshold of 25.7 VMT/employee and 27.2 VMT/capita. As a result, the proposed project would not be consistent with VMT projections upon which the RTP/SCS is based. For this reason, the proposed project could conflict with regional and state-wide GHG-reduction efforts, specifically those related to reductions in mobile-source GHG emissions. No mitigation measures have been identified that would reduce VMT to below applicable thresholds. As a result, this impact would be considered ***significant and unavoidable***.

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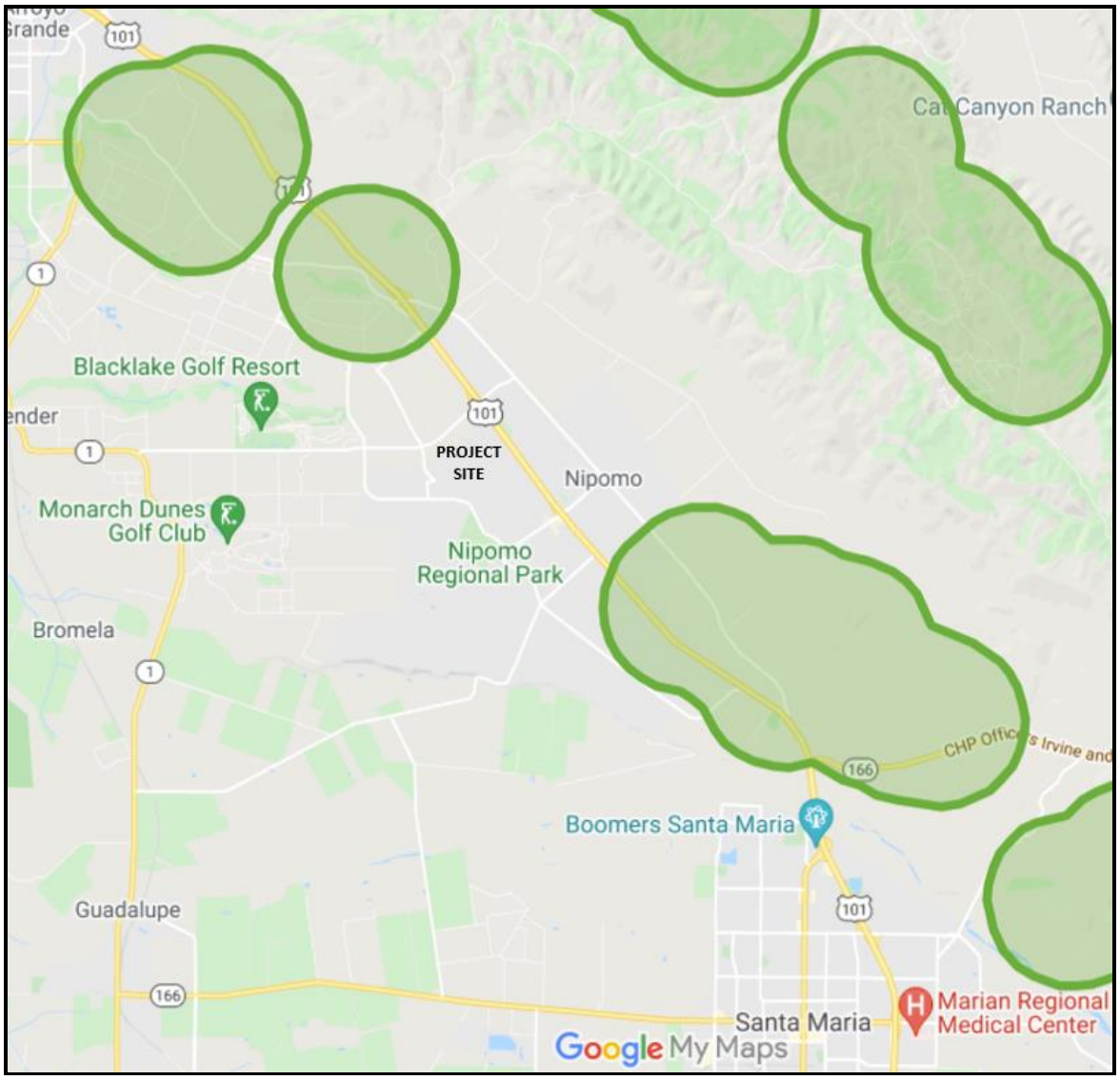
APPENDIX A

Naturally Occurring Asbestos Zones

SLOAPCD Naturally Occurring Asbestos Zone Map (Nipomo and Surrounding Area)



Source: San Luis Obispo County Air Pollution Control District (SLOAPCD). SLOAPCD NOA Map. Website url: https://www.google.com/maps/ d/viewer?mid=1YAKjBzVkwi1bZ4rQ1p6b2OMyvIM&ouid=0&ll=35.04268157348912%2C-120.46229225690405&z=12

APPENDIX B

Emissions Modeling & Supportive Documentation

DAILY EMISSIONS SUMMARY (LBS)

CONSTRUCTION ACTIVITY		ROG	NOX	ROG+NOX	PM10 FUG	PM10 EXH	PM10 TOTAL	PM2.5 FUG	PM2.5 EXH	PM2.5 TOTAL
Summer										
Residential - Grubbing - 2023										
	ONSITE	2.27	21.48	23.75	0.00	1.00	1.00	0.00	0.93	0.93
	OFFSITE	0.05	0.03	0.08	0.15	0.00	0.04	0.04	0.00	0.04
	TOTAL	2.32	21.52	23.83	0.15	1.00	1.04	0.04	0.93	0.97
Residential - SITE PREPARATION - 2023										
	ONSITE	2.66	27.52	30.18	19.66	1.27	20.92	10.10	1.16	11.27
	OFFSITE	0.06	0.04	0.09	0.18	0.00	0.18	0.05	0.00	0.05
	TOTAL	2.72	27.56	30.28	19.84	1.27	21.10	10.15	1.17	11.32
Residential - Grading - 2023										
	ONSITE	3.32	34.52	37.84	9.20	1.42	10.63	3.65	1.31	4.96
	OFFSITE	0.06	0.04	0.11	0.20	0.00	0.20	0.05	0.00	0.05
	TOTAL	3.38	34.56	37.94	9.40	1.43	10.83	3.71	1.31	5.02
Residential - BUILDING CONSTRUCTION - 2024										
	ONSITE	1.47	13.44	14.92	0.00	0.61	0.61	0.00	0.58	0.58
	OFFSITE	6.45	27.97	34.42	21.98	0.23	22.21	5.90	0.22	6.11
	TOTAL	7.92	41.41	49.34	21.98	0.84	22.82	5.90	0.79	6.69
Residential - BUILDING CONSTRUCTION - 2025										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	3.11	27.08	30.20	21.98	0.22	22.20	5.90	0.21	6.11
	TOTAL	4.48	39.55	44.03	21.98	0.75	22.73	5.90	0.71	6.60
Residential - BUILDING CONSTRUCTION - 2026										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	5.82	26.26	32.08	21.98	0.21	22.20	5.90	0.20	6.10
	TOTAL	7.18	38.73	45.92	21.98	0.74	22.72	5.90	0.70	6.59
Residential - BUILDING CONSTRUCTION - 2027										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	5.54	25.52	31.06	21.98	0.21	22.19	5.90	0.19	6.09
	TOTAL	6.91	37.99	44.90	21.98	0.73	22.72	5.90	0.69	6.59
Residential - BUILDING CONSTRUCTION - 2028										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	5.27	24.88	30.15	21.98	0.20	22.18	5.90	0.19	6.08
	TOTAL	6.64	37.35	43.99	21.98	0.73	22.71	5.90	0.68	6.58
Residential - BUILDING CONSTRUCTION - 2029										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.54	0.00	0.50	0.50
	OFFSITE	5.01	24.26	29.27	21.98	0.19	22.17	5.90	0.18	6.08
	TOTAL	6.38	36.73	43.11	21.98	0.72	22.71	5.90	0.68	6.57
Residential - BUILDING CONSTRUCTION - 2030										
	ONSITE	1.31	7.93	9.24	0.00	0.15	0.15	0.00	0.15	0.15
	OFFSITE	4.76	23.76	28.53	21.98	0.18	22.17	5.90	0.17	6.07
	TOTAL	6.07	31.70	37.77	21.98	0.33	22.32	5.90	0.32	6.22
Residential - Arch Coating - 2024										
	ONSITE	37.86	1.22	39.08	0.00	0.06	0.06	0.00	0.06	0.06
	OFFSITE	1.15	0.72	1.87	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	39.01	1.94	40.94	3.82	0.08	3.89	1.01	0.08	1.09
Residential - Arch Coating - 2025										
	ONSITE	37.18	1.15	38.33	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	1.08	0.65	1.73	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	38.27	1.79	40.06	3.82	0.07	3.88	1.01	0.07	1.08
Residential - Arch Coating - 2026										
	ONSITE	37.85	1.15	38.99	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	1.03	0.59	1.61	3.82	0.02	3.83	1.01	0.01	1.03
	TOTAL	38.88	1.73	40.61	3.82	0.07	3.88	1.01	0.07	1.08
Residential - Arch Coating - 2027										
	ONSITE	37.68	1.15	38.82	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	0.98	0.53	1.51	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	38.65	1.68	40.33	3.82	0.07	3.88	1.01	0.07	1.08
Residential - Arch Coating - 2028										
	ONSITE	37.85	1.15	38.99	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	0.93	0.49	1.42	3.82	0.01	3.83	1.01	0.13	1.03
	TOTAL	38.78	1.64	40.41	3.82	0.07	3.88	1.01	0.18	1.08

Residential - Arch Coating - 2029										
	ONSITE	37.85	1.15	38.99	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	0.88	0.45	1.33	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	38.73	1.60	40.33	3.82	0.06	3.88	1.01	0.06	1.08
Residential - Arch Coating - 2030										
	ONSITE	37.81	0.86	38.67	0.00	0.02	0.02	0.00	0.02	0.02
	OFFSITE	0.83	0.42	1.25	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	38.64	1.28	39.92	3.82	0.03	3.85	1.01	0.03	1.04
Residential - Paving - 2030										
	ONSITE	1.38	7.12	8.50	0.00	0.33	0.33	0.00	0.33	0.33
	OFFSITE	0.03	0.02	0.05	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	1.42	7.14	8.55	0.15	0.33	0.48	0.04	0.33	0.37
Commercial & Educational - Building Construction - 2024										
	ONSITE	1.47	13.44	14.92	0.00	0.61	0.61	0.00	0.58	0.58
	OFFSITE	0.50	2.67	3.17	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.97	16.11	18.08	1.72	0.63	2.35	0.46	0.60	1.06
Commercial & Educational - Building Construction - 2025										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	0.47	2.59	3.06	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.84	15.06	16.90	1.72	0.55	2.26	0.46	0.52	0.98
Commercial & Educational - Building Construction - 2026										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	0.45	2.52	2.97	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.82	14.99	16.81	1.72	0.55	2.26	0.46	0.51	0.98
Commercial & Educational - Building Construction - 2027										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	0.43	2.45	2.88	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.80	14.92	16.72	1.72	0.55	2.26	0.46	0.51	0.98
Commercial & Educational - Building Construction - 2028										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	0.41	2.39	2.80	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.78	14.86	16.64	1.72	0.55	2.26	0.46	0.51	0.98
Commercial & Educational - Building Construction - 2029										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	0.39	2.33	2.72	1.72	0.02	1.73	0.46	0.02	0.48
	TOTAL	1.76	14.80	16.56	1.72	0.54	2.26	0.46	0.51	0.97
Commercial & Educational - Arch Coating - 2024										
	ONSITE	2.45	1.22	3.67	0.00	0.06	0.06	0.00	0.06	0.06
	OFFSITE	0.09	0.05	0.14	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.54	1.27	3.81	0.29	0.06	0.35	0.08	0.06	0.14
Commercial & Educational - Arch Coating - 2025										
	ONSITE	2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	0.08	0.05	0.13	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.53	1.19	3.72	0.29	0.05	0.34	0.08	0.05	0.13
Commercial & Educational - Arch Coating - 2026										
	ONSITE	2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	0.08	0.04	0.12	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.52	1.19	3.71	0.29	0.05	0.34	0.08	0.05	0.13
Commercial & Educational - Arch Coating - 2027										
	ONSITE	2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	0.07	0.04	0.11	2.87	0.00	2.87	0.08	0.00	0.08
	TOTAL	2.52	1.19	3.70	2.87	0.05	2.92	0.08	0.05	0.13
Commercial & Educational - Arch Coating - 2028										
	ONSITE	2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.51	1.18	3.70	0.29	0.05	0.34	0.08	0.05	0.13

Commercial & Educational - Arch Coating - 2029										
	ONSITE	2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	0.07	0.03	0.10	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.51	1.18	3.69	0.29	0.05	0.34	0.08	0.05	0.13
Commercial & Educational - Paving - 2029										
	ONSITE	1.59	8.58	10.17	0.00	0.42	0.42	0.00	0.39	0.39
	OFFSITE	0.03	0.02	0.05	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	1.62	8.60	10.22	0.15	0.42	0.57	0.04	0.39	0.42
Hotel - Building Construction - 2026										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	0.08	0.41	0.49	0.29	0.00	0.30	0.08	0.00	0.08
	TOTAL	1.45	12.88	14.33	0.29	0.53	0.82	0.08	0.50	0.58
Hotel - Paving - 2026										
	ONSITE	0.82	7.53	8.35	0.00	0.35	0.35	0.00	0.33	0.33
	OFFSITE	0.05	0.03	0.08	0.20	0.00	0.20	0.05	0.00	0.05
	TOTAL	0.87	7.56	8.44	0.20	0.35	0.55	0.05	0.33	0.38
Hotel - Arch Coating - 2026										
	ONSITE	77.42	1.15	78.57	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	0.01	0.01	0.02	0.05	0.00	0.05	0.01	0.00	0.01
	TOTAL	77.43	1.15	78.59	0.05	0.05	0.10	0.01	0.05	0.06

DAILY EMISSIONS SUMMARY (LBS)

CONSTRUCTION ACTIVITY		ROG	NOX	ROG+NOX	PM10 FUG	PM10 EXH	PM10 TOTAL	PM2.5 FUG	PM2.5 EXH	PM2.5 TOTAL
WINTER										
Residential - Grubbing - 2023										
	ONSITE	2.27	21.48	23.75	0.00	1.00	1.00	0.00	0.93	0.93
	OFFSITE	0.05	0.04	0.09	0.15	0.00	0.15	0.09	0.00	0.04
	TOTAL	2.32	21.52	23.84	0.15	1.00	1.15	0.09	0.93	0.97
Residential - SITE PREPARATION - 2023										
	ONSITE	2.66	27.52	30.18	19.66	1.27	20.92	10.10	1.16	11.27
	OFFSITE	0.06	0.04	0.11	0.19	0.00	0.18	0.05	0.00	0.05
	TOTAL	2.72	27.57	30.29	19.84	1.27	21.10	10.15	1.17	11.32
Residential - Grading - 2023										
	ONSITE	3.32	34.52	37.84	9.20	1.42	10.63	3.65	1.31	4.96
	OFFSITE	0.07	0.05	0.12	0.20	0.00	0.20	0.05	0.00	0.05
	TOTAL	3.39	34.56	37.95	9.40	1.43	10.83	3.71	1.31	5.02
Residential - BUILDING CONSTRUCTION - 2024										
	ONSITE	1.47	13.44	14.92	0.00	0.61	0.61	0.00	0.58	0.58
	OFFSITE	7.05	29.28	36.33	21.98	0.23	22.21	5.90	0.22	6.11
	TOTAL	8.52	42.73	51.25	21.98	0.84	22.82	5.90	0.79	6.69
Residential - BUILDING CONSTRUCTION - 2025										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	6.69	28.34	35.03	21.98	0.22	22.20	5.90	0.21	6.10
	TOTAL	8.06	40.81	48.87	21.98	0.75	22.73	5.90	0.71	6.60
Residential - BUILDING CONSTRUCTION - 2026										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	6.38	27.47	33.85	21.98	0.22	22.20	5.90	0.20	6.10
	TOTAL	7.75	39.94	47.69	21.98	0.74	22.72	5.90	0.70	6.60
Residential - BUILDING CONSTRUCTION - 2027										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	6.09	26.69	32.78	21.98	0.21	22.19	5.90	0.20	6.09
	TOTAL	7.46	39.16	46.61	21.98	0.73	22.72	5.90	0.69	6.59
Residential - BUILDING CONSTRUCTION - 2028										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	5.80	26.01	31.81	21.98	0.20	22.18	5.90	0.19	6.08
	TOTAL	7.17	38.48	45.65	21.98	0.73	22.71	5.90	0.68	6.58
Residential - BUILDING CONSTRUCTION - 2029										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	5.52	25.36	30.88	21.98	0.19	22.17	5.90	0.18	6.08
	TOTAL	6.89	37.83	44.72	21.98	0.72	22.70	5.90	0.68	6.57
Residential - BUILDING CONSTRUCTION - 2030										
	ONSITE	1.31	7.93	9.24	0.00	0.15	0.15	0.00	0.15	0.15
	OFFSITE	5.25	24.84	30.09	21.98	0.18	22.17	5.90	0.17	6.07
	TOTAL	6.56	32.78	39.34	21.98	0.33	22.32	5.90	0.32	6.22
Residential - Arch Coating - 2024										
	ONSITE	37.68	1.22	38.90	0.00	0.06	0.06	0.00	0.06	0.06
	OFFSITE	1.27	0.82	2.09	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	38.95	2.04	40.98	3.82	0.08	3.89	1.01	0.08	1.09
Residential - Arch Coating - 2025										
	ONSITE	37.68	1.15	38.82	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	1.20	0.73	1.94	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	38.88	1.88	40.76	3.82	0.07	3.88	1.01	0.07	1.08
Residential - Arch Coating - 2026										
	ONSITE	37.68	1.15	38.82	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	1.15	0.67	1.81	3.82	0.02	3.83	1.01	0.01	1.03
	TOTAL	38.82	1.81	40.63	3.82	0.07	3.88	1.01	0.07	1.08
Residential - Arch Coating - 2027										
	ONSITE	37.68	1.15	38.82	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	1.09	0.61	1.70	3.82	0.01	3.83	1.01	0.14	1.03
	TOTAL	38.77	1.75	40.52	3.82	0.07	3.88	1.01	0.19	1.08
Residential - Arch Coating - 2028										
	ONSITE	37.85	1.15	38.99	0.00	0.05	0.05	0.00	0.05	0.02
	OFFSITE	1.04	0.56	1.59	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	38.89	1.70	40.59	3.82	0.07	3.88	1.01	0.06	1.04

Residential - Arch Coating - 2029										
	ONSITE	37.85	1.15	38.99	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	0.98	0.52	1.50	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	38.83	1.66	40.49	3.82	0.06	3.88	1.01	0.06	1.08
Residential - Arch Coating - 2030										
	ONSITE	37.81	0.86	38.67	0.00	0.02	0.02	0.00	0.02	0.02
	OFFSITE	0.93	0.48	1.41	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	38.74	1.34	40.08	3.82	0.03	3.85	1.01	0.03	1.04
Residential - Paving - 2030										
	ONSITE	1.38	7.12	8.50	0.00	0.33	0.33	0.00	0.33	0.33
	OFFSITE	0.04	0.02	0.05	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	1.42	7.14	8.56	0.15	0.33	0.48	0.04	0.33	0.37
Commercial & Educational - Building Construction - 2024										
	ONSITE	1.47	13.44	14.92	0.00	0.61	0.61	0.00	0.58	0.58
	OFFSITE	0.50	2.67	3.17	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.97	16.11	18.08	1.72	0.63	2.35	0.46	0.60	1.06
Commercial & Educational - Building Construction - 2025										
	ONSITE	1.40	12.47	13.87	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	0.52	2.70	3.22	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.92	15.17	17.09	1.72	0.55	2.26	0.46	0.52	0.98
Commercial & Educational - Building Construction - 2026										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	0.49	2.63	3.12	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.86	15.10	16.96	1.72	0.55	2.26	0.46	0.51	0.98
Commercial & Educational - Building Construction - 2027										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	0.47	2.55	3.03	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.84	15.02	16.86	1.72	0.55	2.26	0.46	0.51	0.98
Commercial & Educational - Building Construction - 2028										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	0.45	2.49	2.94	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.82	14.96	16.78	1.72	0.55	2.26	0.46	0.51	0.98
Commercial & Educational - Building Construction - 2029										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	0.43	2.44	2.86	1.72	0.02	1.73	0.46	0.02	0.48
	TOTAL	1.80	14.90	16.70	1.72	0.54	2.26	0.46	0.51	0.97
Commercial & Educational - Arch Coating - 2024										
	ONSITE	2.45	1.22	3.67	0.00	0.06	0.06	0.00	0.06	0.06
	OFFSITE	0.09	0.05	0.14	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.54	1.27	3.81	0.29	0.06	0.35	0.08	0.06	0.14
Commercial & Educational - Arch Coating - 2025										
	ONSITE	2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	0.08	0.05	0.13	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.53	1.19	3.72	0.29	0.05	0.34	0.08	0.05	0.13
Commercial & Educational - Arch Coating - 2026										
	ONSITE	2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	0.08	0.04	0.12	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.52	1.19	3.71	0.29	0.05	0.34	0.08	0.05	0.13
Commercial & Educational - Arch Coating - 2027										
	ONSITE	2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.52	1.19	3.70	0.29	0.05	0.34	0.08	0.05	0.13
Commercial & Educational - Arch Coating - 2028										
	ONSITE	2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.51	1.18	3.70	0.29	0.05	0.34	0.08	0.05	0.13

Commercial & Educational - Arch Coating - 2029										
	ONSITE	2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	0.07	0.03	0.10	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.51	1.18	3.69	0.29	0.05	0.34	0.08	0.05	0.13
Commercial & Educational - Paving - 2029										
	ONSITE	3.10	8.58	11.68	0.00	0.42	0.42	0.00	0.39	0.39
	OFFSITE	0.04	0.02	0.06	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	3.14	8.60	11.74	0.15	0.42	0.57	0.04	0.39	0.42
Hotel - Building Construction - 2026										
	ONSITE	1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE	0.08	0.43	0.52	0.29	0.00	0.40	0.08	0.00	0.08
	TOTAL	1.45	12.90	14.35	0.29	0.53	0.92	0.08	0.50	0.58
Hotel - Paving - 2026										
	ONSITE	0.82	7.53	8.35	0.00	0.35	0.35	0.00	0.33	0.33
	OFFSITE	0.06	0.03	0.09	0.20	0.00	0.20	0.05	0.00	0.05
	TOTAL	0.88	7.57	8.45	0.20	0.35	0.55	0.05	0.33	0.38
Hotel - Arch Coating - 2026										
	ONSITE	77.42	1.15	78.57	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE	0.01	0.01	0.02	0.05	0.00	0.05	0.01	0.00	0.01
	TOTAL	77.44	1.15	78.59	0.05	0.05	0.10	0.01	0.05	0.06

EMISSIONS SUMMARY (LBS/DAY)

CONSTRUCTION ACTIVITY		QUARTER	DAYS/ QUARTER	EMISSIONS (LBS/DAY)								
							PM10			PM2.5		
				ROG	NOX	ROG+NOX	FUG	EXH	TOTAL	FUG	EXH	TOTAL
LBS/DAY BY QUARTER												
Grubbing - 2023												
	ONSITE			2.27	21.48	23.75	0.00	1.00	1.00	0.00	0.93	0.93
	OFFSITE			0.05	0.04	0.09	0.15	0.00	0.15	0.09	0.00	0.04
	TOTAL	2023 - Q1	62	2.32	21.52	23.84	0.15	1.00	1.15	0.09	0.93	0.97
Grubbing - 2023												
	ONSITE			2.27	21.48	23.75	0.00	1.00	1.00	0.00	0.93	0.93
	OFFSITE			0.05	0.03	0.08	0.15	0.00	0.04	0.04	0.00	0.04
	TOTAL	2023- Q2	46	2.32	21.52	23.83	0.15	1.00	1.04	0.04	0.93	0.97
Site Prep - 2023												
	ONSITE			2.66	27.52	30.18	19.66	1.27	20.92	10.10	1.16	11.27
	OFFSITE			0.06	0.04	0.11	0.19	0.00	0.18	0.05	0.00	0.05
	TOTAL	2023 - Q1	45	2.72	27.57	30.29	19.84	1.27	21.10	10.15	1.17	11.32
Site Prep - 2023												
	ONSITE			2.66	27.52	30.18	19.66	1.27	20.92	10.10	1.16	11.27
	OFFSITE			0.06	0.04	0.09	0.18	0.00	0.18	0.05	0.00	0.05
	TOTAL	2023 - Q2	63	2.72	27.56	30.28	19.84	1.27	21.10	10.15	1.17	11.32
Grading - 2023												
	ONSITE			3.32	34.52	37.84	9.20	1.42	10.63	3.65	1.31	4.96
	OFFSITE			0.06	0.04	0.11	0.20	0.00	0.20	0.05	0.00	0.05
	TOTAL	2023 - Q3	63	3.38	34.56	37.94	9.40	1.43	10.83	3.71	1.31	5.02
Grading - 2023												
	Onsite			3.32	34.52	37.84	9.20	1.42	10.63	3.65	1.31	4.96
	Offsite			0.07	0.05	0.12	0.20	0.00	0.20	0.05	0.00	0.05
	Total	2023 - Q4	62	3.39	34.56	37.95	9.40	1.43	10.83	3.71	1.31	5.02
Building Construction - 2024												
	ONSITE			1.47	13.44	14.92	0.00	0.61	0.61	0.00	0.58	0.58
	OFFSITE			7.05	29.28	36.33	21.98	0.23	22.21	5.90	0.22	6.11
	TOTAL	2024 - Q1	62	8.52	42.73	51.25	21.98	0.84	22.82	5.90	0.79	6.69
Building Construction - 2024												
	ONSITE			1.47	13.44	14.92	0.00	0.61	0.61	0.00	0.58	0.58
	OFFSITE			6.45	27.97	34.42	21.98	0.23	22.21	5.90	0.22	6.11
	TOTAL	2024 - Q2	63	7.92	41.41	49.34	21.98	0.84	22.82	5.90	0.79	6.69
Building Construction - 2024												
	ONSITE			1.47	13.44	14.92	0.00	0.61	0.61	0.00	0.58	0.58
	OFFSITE			6.45	27.97	34.42	21.98	0.23	22.21	5.90	0.22	6.11
	TOTAL	2024 - Q3	63	7.92	41.41	49.34	21.98	0.84	22.82	5.90	0.79	6.69
Building Construction - 2024												
	ONSITE			1.47	13.44	14.92	0.00	0.61	0.61	0.00	0.58	0.58
	OFFSITE			7.05	29.28	36.33	21.98	0.23	22.21	5.90	0.22	6.11
	TOTAL	2024 - Q4	62	8.52	42.73	51.25	21.98	0.84	22.82	5.90	0.79	6.69
Building Construction - 2025												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			6.69	28.34	35.03	21.98	0.22	22.20	5.90	0.21	6.10
	TOTAL	2025 - Q1	62	8.06	40.81	48.87	21.98	0.75	22.73	5.90	0.71	6.60
Building Construction - 2025												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			3.11	27.08	30.20	21.98	0.22	22.20	5.90	0.21	6.11
	TOTAL	2025 - Q2	63	4.48	39.55	44.03	21.98	0.75	22.73	5.90	0.71	6.60
Building Construction - 2025												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			3.11	27.08	30.20	21.98	0.22	22.20	5.90	0.21	6.11
	TOTAL	2025 - Q3	63	4.48	39.55	44.03	21.98	0.75	22.73	5.90	0.71	6.60
Building Construction - 2025												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			6.69	28.34	35.03	21.98	0.22	22.20	5.90	0.21	6.10
	TOTAL	2025 - Q4	62	8.06	40.81	48.87	21.98	0.75	22.73	5.90	0.71	6.60
Building Construction - 2026												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			6.38	27.47	33.85	21.98	0.22	22.20	5.90	0.20	6.10
	TOTAL	2026 - Q1	62	7.75	39.94	47.69	21.98	0.74	22.72	5.90	0.70	6.60

Building Construction - 2026												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			5.82	26.26	32.08	21.98	0.21	22.20	5.90	0.20	6.10
	TOTAL	2026 - Q2	63	7.18	38.73	45.92	21.98	0.74	22.72	5.90	0.70	6.59
Building Construction - 2026												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			5.82	26.26	32.08	21.98	0.21	22.20	5.90	0.20	6.10
	TOTAL	2026 - Q3	63	7.18	38.73	45.92	21.98	0.74	22.72	5.90	0.70	6.59
Building Construction - 2026												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			6.38	27.47	33.85	21.98	0.22	22.20	5.90	0.20	6.10
	TOTAL	2026 - Q4	62	7.75	39.94	47.69	21.98	0.74	22.72	5.90	0.70	6.60
Building Construction - 2027												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			6.09	26.69	32.78	21.98	0.21	22.19	5.90	0.20	6.09
	TOTAL	2027 - Q1	62	7.46	39.16	46.61	21.98	0.73	22.72	5.90	0.69	6.59
Building Construction - 2027												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			5.54	25.52	31.06	21.98	0.21	22.19	5.90	0.19	6.09
	TOTAL	2027 - Q2	63	6.91	37.99	44.90	21.98	0.73	22.72	5.90	0.69	6.59
Building Construction - 2027												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			5.54	25.52	31.06	21.98	0.21	22.19	5.90	0.19	6.09
	TOTAL	2027 - Q3	63	6.91	37.99	44.90	21.98	0.73	22.72	5.90	0.69	6.59
Building Construction - 2027												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			6.09	26.69	32.78	21.98	0.21	22.19	5.90	0.20	6.09
	TOTAL	2027 - Q4	62	7.46	39.16	46.61	21.98	0.73	22.72	5.90	0.69	6.59
Building Construction - 2028												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			5.80	26.01	31.81	21.98	0.20	22.18	5.90	0.19	6.08
	TOTAL	2028 - Q1	62	7.17	38.48	45.65	21.98	0.73	22.71	5.90	0.68	6.58
Building Construction - 2028												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			5.27	24.88	30.15	21.98	0.20	22.18	5.90	0.19	6.08
	TOTAL	2028 - Q2	63	6.64	37.35	43.99	21.98	0.73	22.71	5.90	0.68	6.58
Building Construction - 2028												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			5.27	24.88	30.15	21.98	0.20	22.18	5.90	0.19	6.08
	TOTAL	2028 - Q3	63	6.64	37.35	43.99	21.98	0.73	22.71	5.90	0.68	6.58
Building Construction - 2028												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			5.80	26.01	31.81	21.98	0.20	22.18	5.90	0.19	6.08
	TOTAL	2028 - Q4	62	7.17	38.48	45.65	21.98	0.73	22.71	5.90	0.68	6.58
Building Construction - 2029												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			5.52	25.36	30.88	21.98	0.19	22.17	5.90	0.18	6.08
	TOTAL	2029 - Q1	62	6.89	37.83	44.72	21.98	0.72	22.70	5.90	0.68	6.57
Building Construction - 2029												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.54	0.00	0.50	0.50
	OFFSITE			5.01	24.26	29.27	21.98	0.19	22.17	5.90	0.18	6.08
	TOTAL	2029 - Q2	63	6.38	36.73	43.11	21.98	0.72	22.71	5.90	0.68	6.57
Building Construction - 2029												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.54	0.00	0.50	0.50
	OFFSITE			5.01	24.26	29.27	21.98	0.19	22.17	5.90	0.18	6.08
	TOTAL	2029 - Q3	63	6.38	36.73	43.11	21.98	0.72	22.71	5.90	0.68	6.57
Building Construction - 2029												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			5.52	25.36	30.88	21.98	0.19	22.17	5.90	0.18	6.08
	TOTAL	2029 - Q4	62	6.89	37.83	44.72	21.98	0.72	22.70	5.90	0.68	6.57
Building Construction - 2030												
	ONSITE			1.31	7.93	9.24	0.00	0.15	0.15	0.00	0.15	0.15
	OFFSITE			5.25	24.84	30.09	21.98	0.18	22.17	5.90	0.17	6.07
	TOTAL	2030 - Q1	62	6.56	32.78	39.34	21.98	0.33	22.32	5.90	0.32	6.22
Building Construction - 2030												
	ONSITE			1.31	7.93	9.24	0.00	0.15	0.15	0.00	0.15	0.15
	OFFSITE			4.76	23.76	28.53	21.98	0.18	22.17	5.90	0.17	6.07
	TOTAL	2030 - Q2	63	6.07	31.70	37.77	21.98	0.33	22.32	5.90	0.32	6.22

Building Construction - 2030												
	ONSITE			1.31	7.93	9.24	0.00	0.15	0.15	0.00	0.15	0.15
	OFFSITE			4.76	23.76	28.53	21.98	0.18	22.17	5.90	0.17	6.07
	TOTAL	2030 - Q3	63	6.07	31.70	37.77	21.98	0.33	22.32	5.90	0.32	6.22
Building Construction - 2030												
	ONSITE			1.31	7.93	9.24	0.00	0.15	0.15	0.00	0.15	0.15
	OFFSITE			5.25	24.84	30.09	21.98	0.18	22.17	5.90	0.17	6.07
	TOTAL	2030 - Q4	62	6.56	32.78	39.34	21.98	0.33	22.32	5.90	0.32	6.22
Arch Coating - 2024												
	ONSITE			37.68	1.22	38.90	0.00	0.06	0.06	0.00	0.06	0.06
	OFFSITE			1.27	0.82	2.09	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	2024 - Q1	23	38.95	2.04	40.98	3.82	0.08	3.89	1.01	0.08	1.09
Arch Coating - 2024												
	ONSITE			37.86	1.22	39.08	0.00	0.06	0.06	0.00	0.06	0.06
	OFFSITE			1.15	0.72	1.87	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	2024 - Q2	63	39.01	1.94	40.94	3.82	0.08	3.89	1.01	0.08	1.09
Arch Coating - 2024												
	ONSITE			37.86	1.22	39.08	0.00	0.06	0.06	0.00	0.06	0.06
	OFFSITE			1.15	0.72	1.87	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	2024 - Q3	63	39.01	1.94	40.94	3.82	0.08	3.89	1.01	0.08	1.09
Arch Coating - 2024												
	ONSITE			37.68	1.22	38.90	0.00	0.06	0.06	0.00	0.06	0.06
	OFFSITE			1.27	0.82	2.09	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	2024 - Q4	62	38.95	2.04	40.98	3.82	0.08	3.89	1.01	0.08	1.09
Arch Coating - 2025												
	ONSITE			37.68	1.15	0.00	0.05	0.05	0.05	0.00	0.05	0.05
	OFFSITE			1.20	0.73	1.94	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	2025 - Q1	62	38.88	1.88	40.76	3.82	0.07	3.88	1.01	0.07	1.08
Arch Coating - 2025												
	ONSITE			37.18	1.15	38.33	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			1.08	0.65	1.73	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	2025 - Q2	63	38.27	1.79	40.06	3.82	0.07	3.88	1.01	0.07	1.08
Arch Coating - 2025												
	ONSITE			37.18	1.15	38.33	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			1.08	0.65	1.73	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	2025 - Q3	63	38.27	1.79	40.06	3.82	0.07	3.88	1.01	0.07	1.08
Arch Coating - 2025												
	ONSITE			37.68	1.15	38.82	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			1.20	0.73	1.94	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	2025 - Q4	62	38.88	1.88	40.76	3.82	0.07	3.88	1.01	0.07	1.08
Arch Coating - 2026												
	ONSITE			37.68	1.15	38.82	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			1.15	0.67	1.81	3.82	0.02	3.83	1.01	0.01	1.03
	TOTAL	2026 - Q1	62	38.82	1.81	40.63	3.82	0.07	3.88	1.01	0.07	1.08
Arch Coating - 2026												
	ONSITE			37.85	1.15	38.99	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			1.03	0.59	1.61	3.82	0.02	3.83	1.01	0.01	1.03
	TOTAL	2026 - Q2	63	38.88	1.73	40.61	3.82	0.07	3.88	1.01	0.07	1.08
Arch Coating - 2026												
	ONSITE			37.85	1.15	38.99	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			1.03	0.59	1.61	3.82	0.02	3.83	1.01	0.01	1.03
	TOTAL	2026 - Q3	63	38.88	1.73	40.61	3.82	0.07	3.88	1.01	0.07	1.08
Arch Coating - 2026												
	ONSITE			37.68	1.15	38.82	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			1.15	0.67	1.81	3.82	0.02	3.83	1.01	0.01	1.03
	TOTAL	2026 - Q4	62	38.82	1.81	40.63	3.82	0.07	3.88	1.01	0.07	1.08
Arch Coating - 2027												
	ONSITE			37.68	1.15	38.82	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			1.09	0.61	1.70	3.82	0.01	3.83	1.01	0.14	1.03
	TOTAL	2027 - Q1	62	38.77	1.75	40.52	3.82	0.07	3.88	1.01	0.19	1.08
Arch Coating - 2027												
	ONSITE			37.68	1.15	38.82	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.98	0.53	1.51	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	2027 - Q2	63	38.65	1.68	40.33	3.82	0.07	3.88	1.01	0.07	1.08
Arch Coating - 2027												
	ONSITE			37.68	1.15	38.82	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.98	0.53	1.51	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	2027 - Q3	63	38.65	1.68	40.33	3.82	0.07	3.88	1.01	0.07	1.08
Arch Coating - 2027												

	ONSITE			37.68	1.15	38.82	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			1.09	0.61	1.70	3.82	0.01	3.83	1.01	0.14	1.03
	TOTAL	2027 - Q4	62	38.77	1.75	40.52	3.82	0.07	3.88	1.01	0.19	1.08
Arch Coating - 2028												
	ONSITE			37.85	1.15	38.99	0.00	0.05	0.05	0.00	0.05	0.02
	OFFSITE			1.04	0.56	1.59	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	2028 - Q1	62	38.89	1.70	40.59	3.82	0.07	3.88	1.01	0.06	1.04
Arch Coating - 2028												
	ONSITE			37.85	1.15	38.99	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.93	0.49	1.42	3.82	0.01	3.83	1.01	0.13	1.03
	TOTAL	2028 - Q2	63	38.78	1.64	40.41	3.82	0.07	3.88	1.01	0.18	1.08
Arch Coating - 2028												
	ONSITE			37.85	1.15	38.99	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.93	0.49	1.42	3.82	0.01	3.83	1.01	0.13	1.03
	TOTAL	2028 - Q3	63	38.78	1.64	40.41	3.82	0.07	3.88	1.01	0.18	1.08
Arch Coating - 2028												
	ONSITE			37.85	1.15	38.99	0.00	0.05	0.05	0.00	0.05	0.02
	OFFSITE			1.04	0.56	1.59	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	2028 - Q4	62	38.89	1.70	40.59	3.82	0.07	3.88	1.01	0.06	1.04
Arch Coating - 2029												
	ONSITE			37.85	1.15	38.99	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.98	0.52	1.50	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	2029 - Q1	62	38.83	1.66	40.49	3.82	0.06	3.88	1.01	0.06	1.08
Arch Coating - 2029												
	ONSITE			37.85	1.15	38.99	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.88	0.45	1.33	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	2029 - Q2	63	38.73	1.60	40.33	3.82	0.06	3.88	1.01	0.06	1.08
Arch Coating - 2029												
	ONSITE			37.85	1.15	38.99	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.88	0.45	1.33	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	2029 - Q3	63	38.73	1.60	40.33	3.82	0.06	3.88	1.01	0.06	1.08
Arch Coating - 2029												
	ONSITE			37.85	1.15	38.99	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.98	0.52	1.50	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	2029 - Q4	62	38.83	1.66	40.49	3.82	0.06	3.88	1.01	0.06	1.08
Arch Coating - 2030												
	ONSITE			37.81	0.86	38.67	0.00	0.02	0.02	0.00	0.02	0.02
	OFFSITE			0.93	0.48	1.41	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	2030 - Q1	62	38.74	1.34	40.08	3.82	0.03	3.85	1.01	0.03	1.04
Arch Coating - 2030												
	ONSITE			37.81	0.86	38.67	0.00	0.02	0.02	0.00	0.02	0.02
	OFFSITE			0.83	0.42	1.25	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	2030 - Q2	63	38.64	1.28	39.92	3.82	0.03	3.85	1.01	0.03	1.04
Arch Coating - 2030												
	ONSITE			37.81	0.86	38.67	0.00	0.02	0.02	0.00	0.02	0.02
	OFFSITE			0.83	0.42	1.25	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	2030 - Q3	63	38.64	1.28	39.92	3.82	0.03	3.85	1.01	0.03	1.04
Arch Coating - 2030												
	ONSITE			37.81	0.86	38.67	0.00	0.02	0.02	0.00	0.02	0.02
	OFFSITE			0.93	0.48	1.41	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	2030 - Q4	62	38.74	1.34	40.08	3.82	0.03	3.85	1.01	0.03	1.04
Paving - 2030												
	ONSITE			1.38	7.12	8.50	0.00	0.33	0.33	0.00	0.33	0.33
	OFFSITE			0.04	0.02	0.05	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	2030 - Q1	42	1.42	7.14	8.56	0.15	0.33	0.48	0.04	0.33	0.37
Paving - 2030												
	ONSITE			1.38	7.12	8.50	0.00	0.33	0.33	0.00	0.33	0.33
	OFFSITE			0.03	0.02	0.05	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	2030 - Q2	63	1.42	7.14	8.55	0.15	0.33	0.48	0.04	0.33	0.37
Paving - 2030												
	ONSITE			1.38	7.12	8.50	0.00	0.33	0.33	0.00	0.33	0.33

	OFFSITE			0.03	0.02	0.05	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	2030 - Q3	63	1.42	7.14	8.55	0.15	0.33	0.48	0.04	0.33	0.37
Paving - 2030												
	ONSITE			1.38	7.12	8.50	0.00	0.33	0.33	0.00	0.33	0.33
	OFFSITE			0.04	0.02	0.05	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	2030 - Q4	42	1.42	7.14	8.56	0.15	0.33	0.48	0.04	0.33	0.37
Commercial and Educational - Building construction - 2024												
	ONSITE			1.47	13.44	14.92	0.00	0.61	0.61	0.00	0.58	0.58
	OFFSITE			0.50	2.67	3.17	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2024 - Q1	62	1.97	16.11	18.08	1.72	0.63	2.35	0.46	0.60	1.06
Commercial and Educational - Building construction - 2024												
	ONSITE			1.47	13.44	14.92	0.00	0.61	0.61	0.00	0.58	0.58
	OFFSITE			0.50	2.67	3.17	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2024 - Q2	63	1.97	16.11	18.08	1.72	0.63	2.35	0.46	0.60	1.06
Commercial and Educational - Building construction - 2024												
	ONSITE			1.47	13.44	14.92	0.00	0.61	0.61	0.00	0.58	0.58
	OFFSITE			0.50	2.67	3.17	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2024 - Q3	63	1.97	16.11	18.08	1.72	0.63	2.35	0.46	0.60	1.06
Commercial and Educational - Building construction - 2024												
	ONSITE			1.47	13.44	14.92	0.00	0.61	0.61	0.00	0.58	0.58
	OFFSITE			0.50	2.67	3.17	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2024 - Q4	62	1.97	16.11	18.08	1.72	0.63	2.35	0.46	0.60	1.06
Commercial and Educational - Building construction - 2025												
	ONSITE			1.40	12.47	13.87	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.52	2.70	3.22	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2025 - Q1	63	1.92	15.17	17.09	1.72	0.55	2.26	0.46	0.52	0.98
Commercial and Educational - Building construction - 2025												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.47	2.59	3.06	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2025 - Q2	63	1.84	15.06	16.90	1.72	0.55	2.26	0.46	0.52	0.98
Commercial and Educational - Building construction - 2025												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.47	2.59	3.06	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2025 - Q3	63	1.84	15.06	16.90	1.72	0.55	2.26	0.46	0.52	0.98
Commercial and Educational - Building construction - 2025												
	ONSITE			1.40	12.47	13.87	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.52	2.70	3.22	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2025 - Q4	62	1.92	15.17	17.09	1.72	0.55	2.26	0.46	0.52	0.98
Commercial and Educational - Building construction - 2026												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.49	2.63	3.12	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2026 - Q1	62	1.86	15.10	16.96	1.72	0.55	2.26	0.46	0.51	0.98
Commercial and Educational - Building construction - 2026												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.45	2.52	2.97	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2026 - Q2	63	1.82	14.99	16.81	1.72	0.55	2.26	0.46	0.51	0.98
Commercial and Educational - Building construction - 2026												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.45	2.52	2.97	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2026 - Q3	63	1.82	14.99	16.81	1.72	0.55	2.26	0.46	0.51	0.98
Commercial and Educational - Building construction - 2026												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.49	2.63	3.12	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2026 - Q4	62	1.86	15.10	16.96	1.72	0.55	2.26	0.46	0.51	0.98
Commercial and Educational - Building construction - 2027												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.47	2.55	3.03	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2027 - Q1	62	1.84	15.02	16.86	1.72	0.55	2.26	0.46	0.51	0.98

Commercial and Educational - Building construction - 2027												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.43	2.45	2.88	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2027 - Q2	63	1.80	14.92	16.72	1.72	0.55	2.26	0.46	0.51	0.98
Commercial and Educational - Building construction - 2027												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.43	2.45	2.88	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2027 - Q3	63	1.80	14.92	16.72	1.72	0.55	2.26	0.46	0.51	0.98
Commercial and Educational - Building construction - 2027												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.47	2.55	3.03	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2027 - Q4	62	1.84	15.02	16.86	1.72	0.55	2.26	0.46	0.51	0.98
Commercial and Educational - Building construction - 2028												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.45	2.49	2.94	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2028 - Q1	62	1.82	14.96	16.78	1.72	0.55	2.26	0.46	0.51	0.98
Commercial and Educational - Building construction - 2028												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.41	2.39	2.80	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2028 - Q2	63	1.78	14.86	16.64	1.72	0.55	2.26	0.46	0.51	0.98
Commercial and Educational - Building construction - 2028												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.41	2.39	2.80	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2028 - Q3	63	1.78	14.86	16.64	1.72	0.55	2.26	0.46	0.51	0.98
Commercial and Educational - Building construction - 2028												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.45	2.49	2.94	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2028 - Q4	62	1.82	14.96	16.78	1.72	0.55	2.26	0.46	0.51	0.98
Commercial and Educational - Building construction - 2029												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.43	2.44	2.86	1.72	0.02	1.73	0.46	0.02	0.48
	TOTAL	2029 - Q1	62	1.80	14.90	16.70	1.72	0.54	2.26	0.46	0.51	0.97
Commercial and Educational - Building construction - 2029												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.39	2.33	2.72	1.72	0.02	1.73	0.46	0.02	0.48
	TOTAL	2029 - Q2	63	1.76	14.80	16.56	1.72	0.54	2.26	0.46	0.51	0.97
Commercial and Educational - Building construction - 2029												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.39	2.33	2.72	1.72	0.02	1.73	0.46	0.02	0.48
	TOTAL	2029 - Q3	63	1.76	14.80	16.56	1.72	0.54	2.26	0.46	0.51	0.97
Commercial and Educational - Building construction - 2029												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.43	2.44	2.86	1.72	0.02	1.73	0.46	0.02	0.48
	TOTAL	2029 - Q4	42	1.80	14.90	16.70	1.72	0.54	2.26	0.46	0.51	0.97
Commercial and Educational - Arch Coating - 2024												
	ONSITE			2.45	1.22	3.67	0.00	0.06	0.06	0.00	0.06	0.06
	OFFSITE			0.09	0.05	0.14	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2024 - Q2	63	2.54	1.27	3.81	0.29	0.06	0.35	0.08	0.06	0.14
Commercial and Educational - Arch Coating - 2024												
	ONSITE			2.45	1.22	3.67	0.00	0.06	0.06	0.00	0.06	0.06
	OFFSITE			0.09	0.05	0.14	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2024 - Q3	63	2.54	1.27	3.81	0.29	0.06	0.35	0.08	0.06	0.14
Commercial and Educational - Arch Coating - 2024												
	ONSITE			2.45	1.22	3.67	0.00	0.06	0.06	0.00	0.06	0.06
	OFFSITE			0.09	0.05	0.14	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2024 - Q4	62	2.54	1.27	3.81	0.29	0.06	0.35	0.08	0.06	0.14
Commercial and Educational - Arch Coating - 2025												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05

	OFFSITE			0.08	0.05	0.13	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2025 - Q1	62	2.53	1.19	3.72	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2025												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.08	0.05	0.13	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2025 - Q2	63	2.53	1.19	3.72	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2025												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.08	0.05	0.13	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2025 - Q3	63	2.53	1.19	3.72	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2025												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.08	0.05	0.13	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2025 - Q4	62	2.53	1.19	3.72	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2026												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.08	0.04	0.12	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2026 - Q1	62	2.52	1.19	3.71	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2026												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.08	0.04	0.12	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2026 - Q2	63	2.52	1.19	3.71	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2026												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.08	0.04	0.12	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2026 - Q3	63	2.52	1.19	3.71	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2026												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.08	0.04	0.12	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2026 - Q4	62	2.52	1.19	3.71	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2027												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2027 - Q1	62	2.52	1.19	3.70	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2027												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.07	0.04	0.11	2.87	0.00	2.87	0.08	0.00	0.08
	TOTAL	2027 - Q2	63	2.52	1.19	3.70	2.87	0.05	2.92	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2027												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.07	0.04	0.11	2.87	0.00	2.87	0.08	0.00	0.08
	TOTAL	2027 - Q3	63	2.52	1.19	3.70	2.87	0.05	2.92	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2027												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2027 - Q4	62	2.52	1.19	3.70	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2028												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2028 - Q1	62	2.51	1.18	3.70	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2028												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2028 - Q2	63	2.51	1.18	3.70	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2028												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2028 - Q3	63	2.51	1.18	3.70	0.29	0.05	0.34	0.08	0.05	0.13

Commercial and Educational - Arch Coating - 2028												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2028 - Q4	62	2.51	1.18	3.70	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2029												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.07	0.03	0.10	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2029 - Q1	62	2.51	1.18	3.69	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2029												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.07	0.03	0.10	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2029 - Q2	63	2.51	1.18	3.69	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2029												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.07	0.03	0.10	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2029 - Q3	63	2.51	1.18	3.69	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Arch Coating - 2029												
	ONSITE			2.44	1.15	3.59	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.07	0.03	0.10	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2029 - Q4	62	2.51	1.18	3.69	0.29	0.05	0.34	0.08	0.05	0.13
Commercial and Educational - Paving - 2029												
	ONSITE			3.10	8.58	11.68	0.00	0.42	0.42	0.00	0.39	0.39
	OFFSITE			0.04	0.02	0.06	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	2029 - Q4	20	3.14	8.60	11.74	0.15	0.42	0.57	0.04	0.39	0.42
Hotel - Building Construction - 2026												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.08	0.43	0.52	0.29	0.00	0.40	0.08	0.00	0.08
	TOTAL	2026 - Q1	62	1.45	12.90	14.35	0.29	0.53	0.92	0.08	0.50	0.58
Hotel - Building Construction - 2026												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.08	0.41	0.49	0.29	0.00	0.30	0.08	0.00	0.08
	TOTAL	2026 - Q2	63	1.45	12.88	14.33	0.29	0.53	0.82	0.08	0.50	0.58
Hotel - Building Construction - 2026												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.08	0.41	0.49	0.29	0.00	0.30	0.08	0.00	0.08
	TOTAL	2026 - Q3	63	1.45	12.88	14.33	0.29	0.53	0.82	0.08	0.50	0.58
Hotel - Building Construction - 2026												
	ONSITE			1.37	12.47	13.84	0.00	0.53	0.53	0.00	0.50	0.50
	OFFSITE			0.08	0.43	0.52	0.29	0.00	0.40	0.08	0.00	0.08
	TOTAL	2026 - Q4	42	1.45	12.90	14.35	0.29	0.53	0.92	0.08	0.50	0.58
Hotel - Paving - 2026												
	ONSITE			0.82	7.53	8.35	0.00	0.35	0.35	0.00	0.33	0.33
	OFFSITE			0.06	0.03	0.09	0.20	0.00	0.20	0.05	0.00	0.05
	TOTAL	2026 - Q4	18	0.88	7.57	8.45	0.20	0.35	0.55	0.05	0.33	0.38
Hotel - Arch Coating - 2026												
	ONSITE			77.42	1.15	78.57	0.00	0.05	0.05	0.00	0.05	0.05
	OFFSITE			0.01	0.01	0.02	0.05	0.00	0.05	0.01	0.00	0.01
	TOTAL	2026 - Q4	18	77.44	1.15	78.59	0.05	0.05	0.10	0.01	0.05	0.06

EMISSIONS SUMMARY (LBS/QTR)

CONSTRUCTION ACTIVITY	EMISSIONS (LBS/QTR)						
		PM10			PM2.5		
	ROG+NOX	FUG	EXH	TOTAL	FUG	EXH	TOTAL
LBS/QUARTER							
Grubbing - 2023							
2023 - Q1	1478.17	9.19	61.89	71.08	5.82	57.58	60.02
Grubbing - 2023							
2023- Q2	1096.29	6.82	45.92	47.69	1.81	42.72	44.53
Site Prep - 2023							
2023 - Q1	1363.01	893.02	57.01	949.58	456.74	52.45	509.18
Site Prep - 2023							
2023 - Q2	1907.53	1249.61	79.81	1329.41	639.43	73.43	712.86
Grading - 2023							
2023 - Q3	2390.33	592.28	89.80	682.09	233.49	82.62	316.11
Grading - 2023							
2023 - Q4	2353.19	582.88	88.38	671.26	229.78	81.30	311.09
Building Construction - 2024							
2024 - Q1	3177.28	1362.83	52.30	1415.13	365.53	49.23	414.77
Building Construction - 2024							
2024 - Q2	3108.13	1384.74	53.10	1437.90	371.42	49.98	421.41
Building Construction - 2024							
2024 - Q3	3108.13	1384.74	53.10	1437.90	371.42	49.98	421.41
Building Construction - 2024							
2024 - Q4	3177.28	1362.83	52.30	1415.13	365.53	49.23	414.77
Building Construction - 2025							
2025 - Q1	3029.98	1362.85	46.54	1409.38	365.54	43.82	409.09

Building Construction - 2025

2025 - Q2	2774.15	1384.83	47.24	1432.07	371.44	44.48	415.91

Building Construction - 2025

2025 - Q3	2774.15	1384.83	47.24	1432.07	371.44	44.48	415.91

Building Construction - 2025

2025 - Q4	3029.98	1362.85	46.54	1409.38	365.54	43.82	409.09

Building Construction - 2026

2026 - Q1	2956.88	1362.87	46.06	1408.93	365.55	43.37	408.91

Building Construction - 2026

2026 - Q2	2892.82	1384.85	46.76	1431.61	371.44	44.02	415.46

Building Construction - 2026

2026 - Q3	2892.82	1384.85	46.76	1431.61	371.44	44.02	415.46

Building Construction - 2026

2026 - Q4	2956.88	1362.87	46.06	1408.93	365.55	43.37	408.91

Building Construction - 2027

2027 - Q1	2889.96	1362.88	45.56	1408.44	365.55	42.90	408.45

Building Construction - 2027

2027 - Q2	2828.41	1384.87	46.25	1431.12	371.45	43.55	414.99

Building Construction - 2027

2027 - Q3	2828.41	1384.87	46.25	1431.12	371.45	43.55	414.99

Building Construction - 2027

2027 - Q4	2889.96	1362.88	45.56	1408.44	365.55	42.90	408.45

Building Construction - 2028

2028 - Q1	2830.36	1362.90	45.07	1407.98	365.56	42.44	408.00

Building Construction - 2028

2028 - Q2	2771.28	1384.74	45.76	1430.64	371.45	43.09	414.54

Building Construction - 2028

2028 - Q3	2771.28	1384.74	45.76	1430.64	371.45	43.09	414.54

Building Construction - 2028

2028 - Q4	2830.36	1362.90	45.07	1407.98	365.56	42.44	408.00

Building Construction - 2029

2029 - Q1	2772.59	1362.92	44.60	1407.51	365.56	41.99	407.55

Building Construction - 2029

2029 - Q2	2715.80	1384.90	45.28	1430.81	371.46	42.63	414.09

Building Construction - 2029

2029 - Q3	2715.80	1384.90	45.28	1430.81	371.46	42.63	414.09

Building Construction - 2029

2029 - Q4	2772.59	1362.92	44.60	1407.51	365.56	41.99	407.55

Building Construction - 2030

2030 - Q1	2438.81	1362.93	20.64	1383.57	365.57	20.01	385.57

Building Construction - 2030

2030 - Q2	2379.54	1384.91	20.94	1405.85	371.47	20.30	391.76

Building Construction - 2030

2030 - Q3	2379.54	1384.91	20.94	1405.85	371.47	20.30	391.76

Building Construction - 2030

2030 - Q4	2438.81	1362.93	20.64	1383.57	365.57	20.01	385.57

Arch Coating - 2024

2024 - Q1	942.62	87.77	1.80	89.57	23.28	1.77	25.05

Arch Coating - 2024

2024 - Q2	2579.45	240.41	4.93	245.34	63.76	4.84	68.61

Arch Coating - 2024

2024 - Q3	2579.45	240.41	4.93	245.34	63.76	4.84	68.61

Arch Coating - 2024

2024 - Q4	2540.97	236.60	4.85	241.45	62.75	4.77	67.52

Arch Coating - 2025

2025 - Q1	2527.14	236.60	4.22	240.47	62.75	4.14	66.89

Arch Coating - 2025

2025 - Q2	2523.75	240.41	4.29	244.35	63.76	4.21	67.97

Arch Coating - 2025

2025 - Q3	2523.75	240.41	4.29	244.35	63.76	4.21	67.97

Arch Coating - 2025

2025 - Q4	2527.14	236.60	4.22	240.47	62.75	4.14	66.89

Arch Coating - 2026

2026 - Q1	2519.30	236.60	4.17	240.77	62.75	4.10	66.85

Arch Coating - 2026

2026 - Q2	2558.33	240.41	4.24	244.65	63.76	4.16	67.93

Arch Coating - 2026

2026 - Q3	2558.33	240.41	4.24	244.65	63.76	4.16	67.93

Arch Coating - 2026

2026 - Q4	2519.30	236.60	4.17	240.77	62.75	4.10	66.85

Arch Coating - 2027

2027 - Q1	2512.30	236.60	4.12	240.72	62.75	11.69	66.79

Arch Coating - 2027

2027 - Q2	2541.08	240.41	4.18	244.60	63.76	4.11	67.87

Arch Coating - 2027

2027 - Q3	2541.08	240.41	4.18	244.60	63.76	4.11	67.87

Arch Coating - 2027

2027 - Q4	2512.30	236.60	4.12	240.72	62.75	11.69	66.79

Arch Coating - 2028

2028 - Q1	2516.49	236.60	4.06	240.65	62.74	3.99	64.49

Arch Coating - 2028

2028 - Q2	2545.94	240.41	4.13	244.53	63.76	11.37	67.82

Arch Coating - 2028

2028 - Q3	2545.94	240.41	4.13	244.53	63.76	11.37	67.82

Arch Coating - 2028

2028 - Q4	2516.49	236.60	4.06	240.65	62.74	3.99	64.49

Arch Coating - 2029

2029 - Q1	2510.61	236.60	4.01	240.60	62.75	3.94	66.69

Arch Coating - 2029

2029 - Q2	2540.53	240.41	3.56	244.48	63.76	4.01	67.77

Arch Coating - 2029

2029 - Q3	2540.53	240.41	3.56	244.48	63.76	4.01	67.77

Arch Coating - 2029

2029 - Q4	2510.61	236.60	4.01	240.60	62.75	3.94	66.69

Arch Coating - 2030

2030 - Q1	2484.79	236.60	2.02	238.61	62.75	1.96	64.71

Arch Coating - 2030

2030 - Q2	2514.81	240.41	2.05	242.46	63.76	1.99	65.77

Arch Coating - 2030

2030 - Q3	2514.81	240.41	2.05	242.46	63.76	1.99	65.77

Arch Coating - 2030

2030 - Q4	2484.79	236.60	2.02	238.61	62.75	1.96	64.71

Paving - 2030

2030 - Q1	359.50	6.23	13.91	20.13	1.65	13.90	15.56

Paving - 2030

2030 - Q2	538.86	9.34	20.86	30.20	2.48	20.86	23.34

Paving - 2030

2030 - Q3	538.86	9.34	20.86	30.20	2.48	20.86	23.34

Paving - 2030

2030 - Q4	359.50	6.23	13.91	20.13	1.65	13.90	15.56

Commercial and Educational - Building construction - 2024

2024 - Q1	1121.21	106.45	39.30	145.76	28.64	36.98	65.61

Commercial and Educational - Building construction - 2024

2024 - Q2	1139.29	108.17	39.93	148.11	29.10	37.57	66.67

Commercial and Educational - Building construction - 2024

2024 - Q3	1139.29	108.17	39.93	148.11	29.10	37.57	66.67

Commercial and Educational - Building construction - 2024

2024 - Q4	1121.21	106.45	39.30	145.76	28.64	36.98	65.61

Commercial and Educational - Building construction - 2025

2025 - Q1	1076.53	108.17	34.50	142.67	29.10	32.46	61.56

Commercial and Educational - Building construction - 2025

2025 - Q2	1064.78	108.17	34.49	142.66	29.10	32.46	61.55

Commercial and Educational - Building construction - 2025

2025 - Q3	1064.78	108.17	34.49	142.66	29.10	32.46	61.55

Commercial and Educational - Building construction - 2025

2025 - Q4	1059.44	106.45	33.95	140.41	28.64	31.94	60.58

Commercial and Educational - Building construction - 2026

2026 - Q1	1051.30	106.45	33.91	140.36	28.64	31.91	60.54

Commercial and Educational - Building construction - 2026

2026 - Q2	1058.72	108.17	34.45	142.63	29.10	32.41	61.51

Commercial and Educational - Building construction - 2026

2026 - Q3	1058.72	108.17	34.45	142.63	29.10	32.41	61.51

Commercial and Educational - Building construction - 2026

2026 - Q4	1051.30	106.45	33.91	140.36	28.64	31.91	60.54

Commercial and Educational - Building construction - 2027

2027 - Q1	1045.54	106.45	33.86	140.32	28.64	31.86	60.50

Commercial and Educational - Building construction - 2027

2027 - Q2	1053.13	108.17	34.41	142.58	29.10	32.38	61.48

Commercial and Educational - Building construction - 2027

2027 - Q3	1053.13	108.17	34.41	142.58	29.10	32.38	61.48

Commercial and Educational - Building construction - 2027

2027 - Q4	1045.54	106.45	33.86	140.32	28.64	31.86	60.50

Commercial and Educational - Building construction - 2028

2028 - Q1	1040.42	106.45	33.79	140.29	28.64	31.82	60.46

Commercial and Educational - Building construction - 2028

2028 - Q2	1048.20	108.18	34.35	142.54	29.04	32.34	61.43

Commercial and Educational - Building construction - 2028

2028 - Q3	1048.20	108.18	34.35	142.54	29.04	32.34	61.43

Commercial and Educational - Building construction - 2028

2028 - Q4	1040.42	106.45	33.79	140.29	28.64	31.82	60.46

Commercial and Educational - Building construction - 2029

2029 - Q1	1035.42	106.45	33.78	140.24	28.64	31.79	60.43

Commercial and Educational - Building construction - 2029

2029 - Q2	1043.37	108.18	34.33	142.51	29.10	32.29	61.39

Commercial and Educational - Building construction - 2029

2029 - Q3	1043.37	108.18	34.33	142.51	29.10	32.29	61.39

Commercial and Educational - Building construction - 2029

2029 - Q4	701.42	72.11	22.89	95.00	19.40	21.53	40.93

Commercial and Educational - Arch Coating - 2024

2024 - Q2	240.20	18.06	3.92	21.98	4.79	3.91	8.70

Commercial and Educational - Arch Coating - 2024

2024 - Q3	240.20	18.06	3.92	21.98	4.79	3.91	8.70

Commercial and Educational - Arch Coating - 2024

2024 - Q4	236.39	17.78	3.86	21.63	4.71	3.85	8.56

Commercial and Educational - Arch Coating - 2025

2025 - Q1	230.59	17.78	3.27	21.05	4.71	3.26	7.98

Commercial and Educational - Arch Coating - 2025

2025 - Q2	234.31	18.06	3.32	21.39	4.79	3.32	8.11

Commercial and Educational - Arch Coating - 2025

2025 - Q3	234.31	18.06	3.32	21.39	4.79	3.32	8.11

Commercial and Educational - Arch Coating - 2025

2025 - Q4	230.59	17.78	3.27	21.05	4.71	3.26	7.98

Commercial and Educational - Arch Coating - 2026

2026 - Q1	230.06	17.78	3.27	21.04	4.71	3.26	7.97

Commercial and Educational - Arch Coating - 2026

2026 - Q2	233.77	18.06	3.32	21.38	4.79	3.31	8.10

Commercial and Educational - Arch Coating - 2026

2026 - Q3	233.77	18.06	3.32	21.38	4.79	3.31	8.10

Commercial and Educational - Arch Coating - 2026

2026 - Q4	230.06	17.78	3.27	21.04	4.71	3.26	7.97

Commercial and Educational - Arch Coating - 2027

2027 - Q1	229.57	17.78	3.26	21.04	4.71	3.26	7.97

Commercial and Educational - Arch Coating - 2027

2027 - Q2	233.28	180.62	3.32	184.05	4.79	3.31	8.10

Commercial and Educational - Arch Coating - 2027

2027 - Q3	233.28	180.62	3.32	184.05	4.79	3.31	8.10

Commercial and Educational - Arch Coating - 2027

2027 - Q4	229.57	17.78	3.26	21.04	4.71	3.26	7.97

Commercial and Educational - Arch Coating - 2028

2028 - Q1	229.14	17.78	3.26	21.04	4.71	3.25	7.97

Commercial and Educational - Arch Coating - 2028

2028 - Q2	232.84	18.06	3.31	21.38	4.79	3.31	8.14

Commercial and Educational - Arch Coating - 2028

2028 - Q3	232.84	18.06	3.31	21.38	4.79	3.31	8.14

Commercial and Educational - Arch Coating - 2028

2028 - Q4	229.14	17.78	3.26	21.04	4.71	3.25	7.97

Commercial and Educational - Arch Coating - 2029

2029 - Q1	228.74	17.78	3.25	21.03	4.71	3.25	7.97

Commercial and Educational - Arch Coating - 2029

2029 - Q2	232.43	18.06	3.31	21.37	4.79	3.30	8.10

Commercial and Educational - Arch Coating - 2029

2029 - Q3	232.43	18.06	3.31	21.37	4.79	3.30	8.10

Commercial and Educational - Arch Coating - 2029

2029 - Q4	228.74	17.78	3.25	21.03	4.71	3.25	7.97

Commercial and Educational - Paving - 2029

2029 - Q4	234.81	2.97	8.38	11.35	0.79	7.71	8.50

Hotel - Building Construction - 2026

2026 - Q1	889.96	18.20	32.91	57.32	4.89	30.96	35.85

Hotel - Building Construction - 2026

2026 - Q2	902.73	18.50	33.44	51.94	4.97	31.46	36.43

Hotel - Building Construction - 2026

2026 - Q3	902.73	18.50	33.44	51.94	4.97	31.46	36.43

Hotel - Building Construction - 2026

2026 - Q4	602.88	12.33	22.29	38.83	3.31	20.97	24.29

Hotel - Paving - 2026

2026 - Q4	152.02	3.56	6.36	9.92	0.94	5.88	6.82

Hotel - Arch Coating - 2026

2026 - Q4	1414.62	0.89	0.93	1.82	0.24	0.93	1.17

EMISSIONS SUMMARY (TONS/QTR)

CONSTRUCTION ACTIVITY		EMISSIONS (TONS/QTR)						
			PM10			PM2.5		
		ROG+NOX	FUG	EXH	TOTAL	FUG	EXH	TOTAL
TONS/QTR								
Grubbing - 2023				0.031				
				0.000				
	2023 - Q1	0.739	0.005	0.031	0.036	0.003	0.029	0.030
Grubbing - 2023				0.023				
				0.000				
	2023- Q2	0.548	0.003	0.023	0.024	0.001	0.021	0.022
Site Prep - 2023				0.028				
				0.000				
	2023 - Q1	0.682	0.447	0.029	0.475	0.228	0.026	0.255
Site Prep - 2023				0.040				
				0.000				
	2023 - Q2	0.954	0.625	0.040	0.665	0.320	0.037	0.356
Grading - 2023				0.045				
				0.000				
	2023 - Q3	1.195	0.296	0.045	0.341	0.117	0.041	0.158
Grading - 2023				0.044				
				0.000				
	2023 - Q4	1.177	0.291	0.044	0.336	0.115	0.041	0.156
Building Construction - 2024				0.019				
				0.007				
	2024 - Q1	1.589	0.681	0.026	0.708	0.183	0.025	0.207
Building Construction - 2024				0.019				
				0.007				
	2024 - Q2	1.554	0.692	0.027	0.719	0.186	0.025	0.211
Building Construction - 2024				0.019				
				0.007				
	2024 - Q3	1.554	0.692	0.027	0.719	0.186	0.025	0.211
Building Construction - 2024				0.019				
				0.007				
	2024 - Q4	1.589	0.681	0.026	0.708	0.183	0.025	0.207
Building Construction - 2025				0.016				
				0.007				
	2025 - Q1	1.515	0.681	0.023	0.705	0.183	0.022	0.205

Building Construction - 2025

			0.017				
			0.007				
2025 - Q2	1.387	0.692	0.024	0.716	0.186	0.022	0.208

Building Construction - 2025

			0.017				
			0.007				
2025 - Q3	1.387	0.692	0.024	0.716	0.186	0.022	0.208

Building Construction - 2025

			0.016				
			0.007				
2025 - Q4	1.515	0.681	0.023	0.705	0.183	0.022	0.205

Building Construction - 2026

			0.016				
			0.007				
2026 - Q1	1.478	0.681	0.023	0.704	0.183	0.022	0.204

Building Construction - 2026

			0.017				
			0.007				
2026 - Q2	1.446	0.692	0.023	0.716	0.186	0.022	0.208

Building Construction - 2026

			0.017				
			0.007				
2026 - Q3	1.446	0.692	0.023	0.716	0.186	0.022	0.208

Building Construction - 2026

			0.016				
			0.007				
2026 - Q4	1.478	0.681	0.023	0.704	0.183	0.022	0.204

Building Construction - 2027

			0.016				
			0.006				
2027 - Q1	1.445	0.681	0.023	0.704	0.183	0.021	0.204

Building Construction - 2027

			0.017				
			0.007				
2027 - Q2	1.414	0.692	0.023	0.716	0.186	0.022	0.207

Building Construction - 2027

			0.017				
			0.007				
2027 - Q3	1.414	0.692	0.023	0.716	0.186	0.022	0.207

Building Construction - 2027

			0.016				
			0.006				
2027 - Q4	1.445	0.681	0.023	0.704	0.183	0.021	0.204

Building Construction - 2028

			0.016				
			0.006				
2028 - Q1	1.415	0.681	0.023	0.704	0.183	0.021	0.204

Building Construction - 2028

			0.017				
			0.006				
2028 - Q2	1.386	0.692	0.023	0.715	0.186	0.022	0.207

Building Construction - 2028

			0.017				
			0.006				
2028 - Q3	1.386	0.692	0.023	0.715	0.186	0.022	0.207

Building Construction - 2028

			0.016				
			0.006				
2028 - Q4	1.415	0.681	0.023	0.704	0.183	0.021	0.204

Building Construction - 2029

			0.016				
			0.006				
2029 - Q1	1.386	0.681	0.022	0.704	0.183	0.021	0.204

Building Construction - 2029

			0.017				
			0.006				
2029 - Q2	1.358	0.692	0.023	0.715	0.186	0.021	0.207

Building Construction - 2029

			0.017				
			0.006				
2029 - Q3	1.358	0.692	0.023	0.715	0.186	0.021	0.207

Building Construction - 2029

			0.016				
			0.006				
2029 - Q4	1.386	0.681	0.022	0.704	0.183	0.021	0.204

Building Construction - 2030

			0.005				
			0.006				
2030 - Q1	1.219	0.681	0.010	0.692	0.183	0.010	0.193

Building Construction - 2030

			0.005				
			0.006				
2030 - Q2	1.190	0.692	0.010	0.703	0.186	0.010	0.196

Building Construction - 2030

			0.005				
			0.006				
2030 - Q3	1.190	0.692	0.010	0.703	0.186	0.010	0.196

Building Construction - 2030

			0.005				
			0.006				
2030 - Q4	1.219	0.681	0.010	0.692	0.183	0.010	0.193

Arch Coating - 2024

			0.001				
			0.000				
2024 - Q1	0.471	0.044	0.001	0.045	0.012	0.001	0.013

Arch Coating - 2024

			0.002				
			0.001				
2024 - Q2	1.290	0.120	0.002	0.123	0.032	0.002	0.034

Arch Coating - 2024

			0.002				
			0.001				
2024 - Q3	1.290	0.120	0.002	0.123	0.032	0.002	0.034

Arch Coating - 2024

			0.002				
			0.001				
2024 - Q4	1.270	0.118	0.002	0.121	0.031	0.002	0.034

Arch Coating - 2025

			0.002				
			0.001				
2025 - Q1	1.264	0.118	0.002	0.120	0.031	0.002	0.033

Arch Coating - 2025

			0.002				
			0.001				
2025 - Q2	1.262	0.120	0.002	0.122	0.032	0.002	0.034

Arch Coating - 2025

			0.002				
			0.001				
2025 - Q3	1.262	0.120	0.002	0.122	0.032	0.002	0.034

Arch Coating - 2025

			0.002				
			0.001				
2025 - Q4	1.264	0.118	0.002	0.120	0.031	0.002	0.033

Arch Coating - 2026

			0.002				
			0.000				
2026 - Q1	1.260	0.118	0.002	0.120	0.031	0.002	0.033

Arch Coating - 2026

			0.002				
			0.000				
2026 - Q2	1.279	0.120	0.002	0.122	0.032	0.002	0.034

Arch Coating - 2026

			0.002				
			0.000				
2026 - Q3	1.279	0.120	0.002	0.122	0.032	0.002	0.034

Arch Coating - 2026

			0.002				
			0.000				
2026 - Q4	1.260	0.118	0.002	0.120	0.031	0.002	0.033

Arch Coating - 2027

			0.002				
			0.000				
2027 - Q1	1.256	0.118	0.002	0.120	0.031	0.006	0.033

Arch Coating - 2027

			0.002				
			0.000				
2027 - Q2	1.271	0.120	0.002	0.122	0.032	0.002	0.034

Arch Coating - 2027

			0.002				
			0.000				
2027 - Q3	1.271	0.120	0.002	0.122	0.032	0.002	0.034

Arch Coating - 2027

			0.002				
			0.000				
2027 - Q4	1.256	0.118	0.002	0.120	0.031	0.006	0.033

Arch Coating - 2028

			0.002				
			0.000				
2028 - Q1	1.258	0.118	0.002	0.120	0.031	0.002	0.032

Arch Coating - 2028

			0.002				
			0.000				
2028 - Q2	1.273	0.120	0.002	0.122	0.032	0.006	0.034

Arch Coating - 2028

			0.002				
			0.000				
2028 - Q3	1.273	0.120	0.002	0.122	0.032	0.006	0.034

Arch Coating - 2028

			0.002				
			0.000				
2028 - Q4	1.258	0.118	0.002	0.120	0.031	0.002	0.032

Arch Coating - 2029

			0.002				
			0.000				
2029 - Q1	1.255	0.118	0.002	0.120	0.031	0.002	0.033

Arch Coating - 2029

			0.002				
			0.000				
2029 - Q2	1.270	0.120	0.002	0.122	0.032	0.002	0.034

Arch Coating - 2029

			0.002				
			0.000				
2029 - Q3	1.270	0.120	0.002	0.122	0.032	0.002	0.034

Arch Coating - 2029

			0.002				
			0.000				
2029 - Q4	1.255	0.118	0.002	0.120	0.031	0.002	0.033

Arch Coating - 2030

			0.001				
			0.000				
2030 - Q1	1.242	0.118	0.001	0.119	0.031	0.001	0.032

Arch Coating - 2030

			0.001				
			0.000				
2030 - Q2	1.257	0.120	0.001	0.121	0.032	0.001	0.033

Arch Coating - 2030

			0.001				
			0.000				
2030 - Q3	1.257	0.120	0.001	0.121	0.032	0.001	0.033

Arch Coating - 2030

			0.001				
			0.000				
2030 - Q4	1.242	0.118	0.001	0.119	0.031	0.001	0.032

Paving - 2030

			0.007				
			0.000				
2030 - Q1	0.180	0.003	0.007	0.010	0.001	0.007	0.008

Paving - 2030

			0.010				
			0.000				
2030 - Q2	0.269	0.005	0.010	0.015	0.001	0.010	0.012

Paving - 2030

			0.010				
			0.000				
2030 - Q3	0.269	0.005	0.010	0.015	0.001	0.010	0.012

Paving - 2030

			0.007				
			0.000				
2030 - Q4	0.180	0.003	0.007	0.010	0.001	0.007	0.008

Commercial and Educational - Building construction - 2024

			0.019				
			0.001				
2024 - Q1	0.561	0.053	0.020	0.073	0.014	0.018	0.033

Commercial and Educational - Building construction - 2024

			0.019				
			0.001				
2024 - Q2	0.570	0.054	0.020	0.074	0.015	0.019	0.033

Commercial and Educational - Building construction - 2024

			0.019				
			0.001				
2024 - Q3	0.570	0.054	0.020	0.074	0.015	0.019	0.033

Commercial and Educational - Building construction - 2024

			0.019				
			0.001				
2024 - Q4	0.561	0.053	0.020	0.073	0.014	0.018	0.033

Commercial and Educational - Building construction - 2025

			0.017				
			0.001				
2025 - Q1	0.538	0.054	0.017	0.071	0.015	0.016	0.031

Commercial and Educational - Building construction - 2025

			0.017				
			0.001				
2025 - Q2	0.532	0.054	0.017	0.071	0.015	0.016	0.031

Commercial and Educational - Building construction - 2025

			0.017				
			0.001				
2025 - Q3	0.532	0.054	0.017	0.071	0.015	0.016	0.031

Commercial and Educational - Building construction - 2025

			0.016				
			0.001				
2025 - Q4	0.530	0.053	0.017	0.070	0.014	0.016	0.030

Commercial and Educational - Building construction - 2026

			0.016				
			0.001				
2026 - Q1	0.526	0.053	0.017	0.070	0.014	0.016	0.030

Commercial and Educational - Building construction - 2026

			0.017				
			0.001				
2026 - Q2	0.529	0.054	0.017	0.071	0.015	0.016	0.031

Commercial and Educational - Building construction - 2026

			0.017				
			0.001				
2026 - Q3	0.529	0.054	0.017	0.071	0.015	0.016	0.031

Commercial and Educational - Building construction - 2026

			0.016				
			0.001				
2026 - Q4	0.526	0.053	0.017	0.070	0.014	0.016	0.030

Commercial and Educational - Building construction - 2027

			0.016				
			0.001				
2027 - Q1	0.523	0.053	0.017	0.070	0.014	0.016	0.030

Commercial and Educational - Building construction - 2027

			0.017				
			0.001				
2027 - Q2	0.527	0.054	0.017	0.071	0.015	0.016	0.031

Commercial and Educational - Building construction - 2027

			0.017				
			0.001				
2027 - Q3	0.527	0.054	0.017	0.071	0.015	0.016	0.031

Commercial and Educational - Building construction - 2027

			0.016				
			0.001				
2027 - Q4	0.523	0.053	0.017	0.070	0.014	0.016	0.030

Commercial and Educational - Building construction - 2028

			0.016				
			0.001				
2028 - Q1	0.520	0.053	0.017	0.070	0.014	0.016	0.030

Commercial and Educational - Building construction - 2028

			0.017				
			0.001				
2028 - Q2	0.524	0.054	0.017	0.071	0.015	0.016	0.031

Commercial and Educational - Building construction - 2028

			0.017				
			0.001				
2028 - Q3	0.524	0.054	0.017	0.071	0.015	0.016	0.031

Commercial and Educational - Building construction - 2028

			0.016				
			0.001				
2028 - Q4	0.520	0.053	0.017	0.070	0.014	0.016	0.030

Commercial and Educational - Building construction - 2029

			0.016				
			0.001				
2029 - Q1	0.518	0.053	0.017	0.070	0.014	0.016	0.030

Commercial and Educational - Building construction - 2029

			0.017				
			0.001				
2029 - Q2	0.522	0.054	0.017	0.071	0.015	0.016	0.031

Commercial and Educational - Building construction - 2029

			0.017				
			0.001				
2029 - Q3	0.522	0.054	0.017	0.071	0.015	0.016	0.031

Commercial and Educational - Building construction - 2029

			0.011				
			0.000				
2029 - Q4	0.351	0.036	0.011	0.048	0.010	0.011	0.020

Commercial and Educational - Arch Coating - 2024

			0.002				
			0.000				
2024 - Q2	0.120	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2024

			0.002				
			0.000				
2024 - Q3	0.120	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2024

			0.002				
			0.000				
2024 - Q4	0.118	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2025

			0.002				
			0.000				
2025 - Q1	0.115	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2025

			0.002				
			0.000				
2025 - Q2	0.117	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2025

			0.002				
			0.000				
2025 - Q3	0.117	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2025

			0.002				
			0.000				
2025 - Q4	0.115	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2026

			0.002				
			0.000				
2026 - Q1	0.115	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2026

			0.002				
			0.000				
2026 - Q2	0.117	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2026

			0.002				
			0.000				
2026 - Q3	0.117	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2026

			0.002				
			0.000				
2026 - Q4	0.115	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2027

			0.002				
			0.000				
2027 - Q1	0.115	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2027

			0.002				
			0.000				
2027 - Q2	0.117	0.090	0.002	0.092	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2027

			0.002				
			0.000				
2027 - Q3	0.117	0.090	0.002	0.092	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2027

			0.002				
			0.000				
2027 - Q4	0.115	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2028

			0.002				
			0.000				
2028 - Q1	0.115	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2028

			0.002				
			0.000				
2028 - Q2	0.116	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2028

			0.002				
			0.000				
2028 - Q3	0.116	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2028

			0.002				
			0.000				
2028 - Q4	0.115	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2029

			0.002				
			0.000				
2029 - Q1	0.114	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2029

			0.002				
			0.000				
2029 - Q2	0.116	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2029

			0.002				
			0.000				
2029 - Q3	0.116	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Arch Coating - 2029

			0.002				
			0.000				
2029 - Q4	0.114	0.009	0.002	0.011	0.002	0.002	0.004

Commercial and Educational - Paving - 2029

			0.004				
			0.000				
2029 - Q4	0.117	0.001	0.004	0.006	0.000	0.004	0.004

Hotel - Building Construction - 2026

			0.016				
			0.000				
2026 - Q1	0.445	0.009	0.016	0.029	0.002	0.015	0.018

Hotel - Building Construction - 2026

			0.017				
			0.000				
2026 - Q2	0.451	0.009	0.017	0.026	0.002	0.016	0.018

Hotel - Building Construction - 2026

			0.017				
			0.000				
2026 - Q3	0.451	0.009	0.017	0.026	0.002	0.016	0.018

Hotel - Building Construction - 2026

			0.011				
			0.000				
2026 - Q4	0.301	0.006	0.011	0.019	0.002	0.010	0.012

Hotel - Paving - 2026

			0.003				
			0.000				
2026 - Q4	0.076	0.002	0.003	0.005	0.000	0.003	0.003

Hotel - Arch Coating - 2026

			0.000				
			0.000				
2026 - Q4	0.707	0.000	0.000	0.001	0.000	0.000	0.001

EMISSIONS SUMMARY (TONS/QTR COMPARED TO THRESHOLDS)

	EMISSIONS (TONS/QTR)						
		PM10			PM2.5		
CONSTRUCTION QUARTER	ROG+NOX	FUG	EXH	TOTAL	FUG	EXH	TOTAL
2023 Q1	1.42	0.45	0.06	0.51	0.23	0.06	0.28
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	No / No	No	No				
2023 Q2	1.50	0.63	0.06	0.69	0.32	0.06	0.38
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				
2023 Q3	1.20	0.30	0.04	0.34	0.12	0.04	0.16
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				
2023 Q4	1.18	0.29	0.04	0.34	0.11	0.04	0.16
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				
2024 Q1	2.62	0.78	0.05	0.83	0.21	0.04	0.25
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	No / No	No	No				
2024 Q2	3.53	0.88	0.05	0.93	0.23	0.05	0.28
TIER 1&2 THRESHOLDS	2.5 / 6.3	0	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				
2024 Q3	3.53	0.88	0.05	0.93	0.23	0.05	0.28
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	No / No	No	No				
2024 Q4	3.54	0.86	0.05	0.91	0.23	0.05	0.28
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	No / No	No	No				
2025 Q1	3.43	0.86	0.04	0.91	0.23	0.04	0.27
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	No / No	No	No				
2025 Q2	3.30	0.88	0.04	0.92	0.23	0.04	0.28
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	No / No	No	No				
2025 Q3	3.30	0.88	0.04	0.92	0.23	0.04	0.28
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	No / No	No	No				
2025 Q4	3.42	0.86	0.04	0.91	0.23	0.04	0.27
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	No / No	No	No				
2026 Q1	3.82	0.87	0.06	0.93	0.23	0.06	0.29
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	No / No	No	No				
2026 Q2	3.82	0.88	0.06	0.95	0.24	0.06	0.29
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	No / No	No	No				
2026 Q3	3.82	0.88	0.06	0.95	0.24	0.06	0.29
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	No / No	No	No				
2026 Q4	4.46	0.87	0.06	0.93	0.23	0.06	0.29
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	No / No	No	No				

2027	Q1	3.34	0.86	0.04	0.91	0.23	0.04	0.27
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No / No	No	No				
2027	Q2	3.33	0.96	0.04	1.00	0.23	0.04	0.28
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No / No	No	No				
2027	Q3	3.33	0.96	0.04	1.00	0.23	0.04	0.28
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No / No	No	No				
2027	Q4	3.34	0.86	0.04	0.91	0.23	0.04	0.27
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No / No	No	No				
2028	Q1	3.31	0.86	0.04	0.90	0.23	0.04	0.27
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No / No	No	No				
2028	Q2	3.30	0.88	0.04	0.92	0.23	0.05	0.28
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No / No	No	No				
2028	Q3	3.30	0.88	0.04	0.92	0.23	0.05	0.28
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No / No	No	No				
2028	Q4	3.31	0.86	0.04	0.90	0.23	0.04	0.27
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No / No	No	No				
2029	Q1	3.27	0.86	0.04	0.90	0.23	0.04	0.27
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No / No	No	No				
2029	Q2	3.27	0.88	0.04	0.92	0.23	0.04	0.28
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No / No	No	No				
2029	Q3	3.27	0.88	0.04	0.92	0.23	0.04	0.28
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No / No	No	No				
2029	Q4	3.22	0.85	0.04	0.89	0.23	0.04	0.27
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No / No	No	No				
2030	Q1	2.64	0.80	0.02	0.82	0.21	0.02	0.23
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No / No	No	No				
2030	Q2	2.72	0.82	0.02	0.84	0.22	0.02	0.24
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No / No	No	No				
2030	Q3	2.72	0.82	0.02	0.84	0.22	0.02	0.24
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No / No	No	No				
2030	Q4	2.64	0.80	0.02	0.82	0.21	0.02	0.23
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No / No	No	No				

DAILY EMISSIONS SUMMARY (LBS)

CONSTRUCTION ACTIVITY		ROG	NOX	ROG+NOX	PM10 FUG	PM10 EXH	PM10 TOTAL	PM2.5 FUG	PM2.5 EXH	PM2.5 TOTAL
Summer										
Residential - Grubbing - 2023										
	ONSITE	0.92	18.31	19.24	0.00	0.86	0.86	0.00	0.86	0.86
	OFFSITE	0.05	0.03	0.08	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	0.97	18.34	19.32	0.15	0.86	1.01	0.04	0.86	0.90
Residential - SITE PREPARATION - 2023										
	ONSITE	0.93	19.07	20.00	7.67	0.95	8.61	3.94	0.95	4.89
	OFFSITE	0.06	0.04	0.09	0.18	0.00	0.18	0.05	0.00	0.05
	TOTAL	0.99	19.10	20.09	7.84	0.95	8.79	3.99	0.95	4.93
Residential - Grading - 2023										
	ONSITE	1.52	29.98	31.50	3.59	1.30	4.89	1.43	1.30	2.72
	OFFSITE	0.06	0.04	0.11	0.20	0.00	0.20	0.05	0.00	0.05
	TOTAL	1.59	30.02	31.61	3.79	1.30	5.09	1.48	1.30	2.78
Residential - BUILDING CONSTRUCTION - 2024										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	6.45	27.97	34.42	21.98	0.23	22.21	5.90	0.22	6.11
	TOTAL	7.13	42.19	49.32	21.98	1.13	23.11	5.90	1.12	7.02
Residential - BUILDING CONSTRUCTION - 2025										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	6.11	27.08	33.20	21.98	0.22	22.20	5.90	0.21	6.11
	TOTAL	6.79	41.31	48.10	21.98	1.13	23.11	5.90	1.11	7.01
Residential - BUILDING CONSTRUCTION - 2026										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	5.82	26.26	32.08	21.98	0.21	22.20	5.90	0.20	6.10
	TOTAL	6.49	40.49	46.98	21.98	1.12	23.10	5.90	1.11	7.00
Residential - BUILDING CONSTRUCTION - 2027										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	5.54	25.52	31.06	21.98	0.21	22.19	5.90	0.19	6.09
	TOTAL	6.21	39.74	45.96	21.98	1.11	23.09	5.90	1.10	6.99
Residential - BUILDING CONSTRUCTION - 2028										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	5.27	24.88	30.15	21.98	0.20	22.18	5.90	0.19	6.08
	TOTAL	5.95	39.10	45.05	21.98	1.10	23.08	5.90	1.09	6.99
Residential - BUILDING CONSTRUCTION - 2029										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	5.01	24.26	29.27	21.98	0.19	22.17	5.90	0.18	6.08
	TOTAL	5.69	38.48	44.17	21.98	1.09	23.08	5.90	1.08	6.98
Residential - BUILDING CONSTRUCTION - 2030										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	4.76	23.76	28.53	21.98	0.18	22.17	5.90	0.17	6.07
	TOTAL	5.44	37.99	43.43	21.98	1.09	23.07	5.90	1.08	6.97
Residential - Arch Coating - 2024										
	ONSITE	37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	1.15	0.72	1.87	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	38.88	2.08	40.96	3.82	0.11	3.93	1.01	0.11	1.12
Residential - Arch Coating - 2025										
	ONSITE	37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	1.08	0.65	1.73	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	38.82	2.00	40.82	3.82	0.11	3.93	1.01	0.11	1.12
Residential - Arch Coating - 2026										
	ONSITE	37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	1.03	0.59	1.61	3.82	0.02	3.83	1.01	0.01	1.03
	TOTAL	38.77	1.94	40.71	3.82	0.11	3.93	1.01	0.11	1.12
Residential - Arch Coating - 2027										
	ONSITE	37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.98	0.53	1.51	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	38.71	1.89	40.61	3.82	0.11	3.93	1.01	0.11	1.12
Residential - Arch Coating - 2028										
	ONSITE	37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.93	0.49	1.42	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	38.66	1.85	40.51	3.82	0.11	3.93	1.01	0.11	1.12

Residential - Arch Coating - 2029										
	ONSITE	37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.88	0.45	1.33	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	38.61	1.81	40.43	3.82	0.11	3.92	1.01	0.11	1.12
Residential - Arch Coating - 2030										
	ONSITE	37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.08	0.42	0.51	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	37.82	1.78	39.60	3.82	0.11	3.92	1.01	0.11	1.12
Residential - Paving - 2030										
	ONSITE	0.56	11.30	11.86	0.00	0.61	0.61	0.00	0.61	0.61
	OFFSITE	0.03	0.02	0.05	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	0.59	11.31	11.90	0.15	0.61	0.76	0.04	0.61	0.65
Commercial & Educational - Building Construction - 2024										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	0.50	2.67	3.17	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.17	16.89	18.07	1.72	0.92	2.64	0.46	0.92	1.38
Commercial & Educational - Building Construction - 2025										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	0.47	2.59	3.06	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.15	16.82	17.96	1.72	0.92	2.64	0.46	0.92	1.38
Commercial & Educational - Building Construction - 2026										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	0.45	2.52	2.97	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.13	16.74	17.87	1.72	0.92	2.64	0.46	0.92	1.38
Commercial & Educational - Building Construction - 2027										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	0.43	2.45	2.88	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.11	16.67	17.78	1.72	0.92	2.64	0.46	0.92	1.38
Commercial & Educational - Building Construction - 2028										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	0.41	2.39	2.80	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.08	16.62	17.70	1.72	0.92	2.64	0.46	0.92	1.38
Commercial & Educational - Building Construction - 2029										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	0.39	2.33	2.72	1.72	0.02	1.73	0.46	0.02	0.48
	TOTAL	1.06	16.56	17.62	1.72	0.92	2.64	0.46	0.92	1.38
Commercial & Educational - Arch Coating - 2024										
	ONSITE	2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.09	0.05	0.14	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.42	1.41	3.83	0.29	0.10	0.38	0.08	0.10	0.17
Commercial & Educational - Arch Coating - 2025										
	ONSITE	2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.08	0.05	0.13	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.41	1.41	3.82	0.29	0.10	0.38	0.08	0.10	0.17
Commercial & Educational - Arch Coating - 2026										
	ONSITE	2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.08	0.04	0.12	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.41	1.40	3.81	0.29	0.10	0.38	0.08	0.10	0.17
Commercial & Educational - Arch Coating - 2027										
	ONSITE	2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.41	1.40	3.80	0.29	0.10	0.38	0.08	0.10	0.17
Commercial & Educational - Arch Coating - 2028										
	ONSITE	2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.40	1.39	3.80	0.29	0.10	0.38	0.08	0.10	0.17

Commercial & Educational - Arch Coating - 2029										
	ONSITE	2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.07	0.03	0.10	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.40	1.39	3.79	0.29	0.10	0.38	0.08	0.10	0.17
Commercial & Educational - Paving - 2029										
	ONSITE	2.75	11.30	14.04	0.00	0.61	0.61	0.00	0.61	0.61
	OFFSITE	0.03	0.02	0.05	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	2.78	11.31	14.10	0.15	0.61	0.76	0.04	0.61	0.65
Hotel - Building Construction - 2026										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	0.08	0.41	0.49	0.29	0.00	0.30	0.08	0.00	0.08
	TOTAL	0.75	14.64	15.39	0.29	0.91	1.20	0.08	0.91	0.99
Hotel - Paving - 2026										
	ONSITE	0.44	9.09	9.53	0.00	0.52	0.52	0.00	0.52	0.52
	OFFSITE	0.05	0.03	0.08	0.20	0.00	0.20	0.05	0.00	0.05
	TOTAL	0.49	9.12	9.61	0.20	0.53	0.72	0.05	0.53	0.58
Hotel - Arch Coating - 2026										
	ONSITE	77.31	1.36	78.67	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.01	0.01	0.02	0.05	0.00	0.05	0.01	0.00	0.01
	TOTAL	77.32	1.36	78.69	0.05	0.10	0.14	0.01	0.10	0.11

DAILY EMISSIONS SUMMARY (LBS)

CONSTRUCTION ACTIVITY		ROG	NOX	ROG+NOX	PM10 FUG	PM10 EXH	PM10 TOTAL	PM2.5 FUG	PM2.5 EXH	PM2.5 TOTAL
WINTER										
Residential - Grubbing - 2023										
	ONSITE	0.92	18.31	19.24	0.00	0.86	0.86	0.00	0.86	0.86
	OFFSITE	0.05	0.04	0.09	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	0.98	18.35	19.33	0.15	0.86	1.01	0.04	0.86	0.90
Residential - SITE PREPARATION - 2023										
	ONSITE	0.93	19.07	20.00	7.67	0.95	8.61	3.94	0.95	4.89
	OFFSITE	0.06	0.04	0.11	0.18	0.00	0.18	0.05	0.00	0.05
	TOTAL	0.99	19.11	20.10	7.84	0.95	8.79	3.99	0.95	4.93
Residential - Grading - 2023										
	ONSITE	1.52	29.98	31.50	3.59	1.30	4.89	1.43	1.30	2.72
	OFFSITE	0.07	0.05	0.12	0.20	0.00	0.20	0.05	0.00	0.05
	TOTAL	1.59	30.03	31.62	3.79	1.30	5.09	1.48	1.30	2.78
Residential - BUILDING CONSTRUCTION - 2024										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	7.05	29.28	36.33	21.98	0.23	22.21	5.90	0.22	6.11
	TOTAL	7.72	43.51	51.23	21.98	1.13	23.12	5.90	1.12	7.02
Residential - BUILDING CONSTRUCTION - 2025										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	6.69	28.34	35.03	21.98	0.22	22.20	5.90	0.21	6.11
	TOTAL	7.37	42.57	49.93	21.98	1.13	23.11	5.90	1.11	7.01
Residential - BUILDING CONSTRUCTION - 2026										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	6.38	27.47	33.85	21.98	0.22	22.20	5.90	0.20	6.10
	TOTAL	7.05	41.70	48.75	21.98	1.12	23.10	5.90	1.11	7.00
Residential - BUILDING CONSTRUCTION - 2027										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	6.09	26.69	32.78	21.98	0.21	22.19	5.90	0.20	6.09
	TOTAL	6.76	40.91	47.68	21.98	1.11	23.09	5.90	1.10	7.00
Residential - BUILDING CONSTRUCTION - 2028										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	5.80	26.01	31.81	21.98	0.20	22.18	5.90	0.19	6.08
	TOTAL	6.47	40.24	46.71	21.98	1.10	23.09	5.90	1.09	6.99
Residential - BUILDING CONSTRUCTION - 2029										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	5.52	25.36	30.88	21.98	0.19	22.17	5.90	0.18	6.08
	TOTAL	6.19	39.59	45.78	21.98	1.10	23.08	5.90	1.08	6.98
Residential - BUILDING CONSTRUCTION - 2030										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	5.25	24.84	30.09	21.98	0.18	22.17	5.90	0.17	6.07
	TOTAL	5.92	39.07	44.99	21.98	1.09	23.07	5.90	1.08	6.97
Residential - Arch Coating - 2024										
	ONSITE	37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	1.27	0.82	2.09	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	39.01	2.17	41.18	3.82	0.11	3.93	1.01	0.11	1.12
Residential - Arch Coating - 2025										
	ONSITE	37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	1.20	0.73	1.94	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	38.94	2.09	41.03	3.82	0.11	3.93	1.01	0.11	1.12
Residential - Arch Coating - 2026										
	ONSITE	37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	1.15	0.67	1.81	3.82	0.02	3.83	1.01	0.01	1.03
	TOTAL	38.88	2.02	40.90	3.82	0.11	3.93	1.01	0.11	1.12
Residential - Arch Coating - 2027										
	ONSITE	37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	1.09	0.61	1.70	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	38.83	1.96	40.79	3.82	0.11	3.93	1.01	0.11	1.12
Residential - Arch Coating - 2028										
	ONSITE	37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	1.04	0.56	1.59	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	38.77	1.91	40.69	3.82	0.11	3.93	1.01	0.11	1.12

Residential - Arch Coating - 2029										
	ONSITE	37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.98	0.52	1.50	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	38.72	1.87	40.59	3.82	0.11	3.92	1.01	0.11	1.12
Residential - Arch Coating - 2030										
	ONSITE	37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.93	0.48	1.41	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	38.67	1.84	40.51	3.82	0.11	3.92	1.01	0.11	1.12
Residential - Paving - 2030										
	ONSITE	0.56	11.30	11.86	0.00	0.61	0.61	0.00	0.61	0.61
	OFFSITE	0.04	0.02	0.05	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	0.60	11.31	11.91	0.15	0.61	0.76	0.04	0.61	0.65
Commercial & Educational - Building Construction - 2024										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	0.55	2.79	3.33	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.22	17.01	18.23	1.72	0.92	2.64	0.46	0.92	1.39
Commercial & Educational - Building Construction - 2025										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	0.52	2.70	3.22	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.19	16.93	18.12	1.72	0.92	2.64	0.46	0.92	1.38
Commercial & Educational - Building Construction - 2026										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	0.49	2.63	3.12	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.17	16.85	18.02	1.72	0.92	2.64	0.46	0.92	1.38
Commercial & Educational - Building Construction - 2027										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	0.47	2.55	3.03	1.71	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.15	16.78	17.93	1.71	0.92	2.64	0.46	0.92	1.38
Commercial & Educational - Building Construction - 2028										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	0.45	2.49	2.94	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	1.12	16.72	17.84	1.72	0.92	2.64	0.46	0.92	1.38
Commercial & Educational - Building Construction - 2029										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	0.43	2.44	2.86	1.72	0.02	1.73	0.46	0.02	0.48
	TOTAL	1.10	16.66	17.76	1.72	0.92	2.64	0.46	0.92	1.38
Commercial & Educational - Arch Coating - 2024										
	ONSITE	2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.10	0.06	0.16	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.43	1.42	3.85	0.29	0.10	0.38	0.08	0.10	0.17
Commercial & Educational - Arch Coating - 2025										
	ONSITE	2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.09	0.06	0.15	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.42	1.41	3.83	0.29	0.10	0.38	0.08	0.10	0.17
Commercial & Educational - Arch Coating - 2026										
	ONSITE	2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.09	0.05	0.14	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.42	1.41	3.83	0.29	0.10	0.38	0.08	0.10	0.17
Commercial & Educational - Arch Coating - 2027										
	ONSITE	2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.08	0.05	0.13	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.41	1.40	3.82	0.29	0.10	0.38	0.08	0.10	0.17
Commercial & Educational - Arch Coating - 2028										
	ONSITE	2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.08	0.04	0.12	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.41	1.40	3.81	0.29	0.10	0.38	0.08	0.10	0.17

Commercial & Educational - Arch Coating - 2029										
	ONSITE	2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2.41	1.40	3.80	0.29	0.10	0.38	0.08	0.10	0.17
Commercial & Educational - Paving - 2029										
	ONSITE	2.75	11.30	14.04	0.00	0.61	0.61	0.00	0.61	0.61
	OFFSITE	0.04	0.02	0.06	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	2.79	11.32	14.10	0.15	0.61	0.76	0.04	0.61	0.65
Hotel - Building Construction - 2026										
	ONSITE	0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE	0.08	0.43	0.52	0.29	0.00	0.30	0.08	0.00	0.08
	TOTAL	0.76	14.66	15.42	0.29	0.91	1.20	0.08	0.91	0.99
Hotel - Paving - 2026										
	ONSITE	0.44	9.09	9.53	0.00	0.52	0.52	0.00	0.52	0.52
	OFFSITE	0.06	0.03	0.09	0.20	0.00	0.20	0.05	0.00	0.05
	TOTAL	0.50	9.12	9.62	0.20	0.53	0.72	0.05	0.53	0.58
Hotel - Arch Coating - 2026										
	ONSITE	77.31	1.36	78.67	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE	0.01	0.01	0.02	0.05	0.00	0.05	0.01	0.00	0.01
	TOTAL	77.32	1.37	78.69	0.05	0.10	0.14	0.01	0.10	0.11

EMISSIONS SUMMARY (LBS/DAY)

CONSTRUCTION ACTIVITY		QUARTER	DAYS/ QUARTER	EMISSIONS (LBS/DAY)								
							PM10			PM2.5		
				ROG	NOX	ROG+NOX	FUG	EXH	TOTAL	FUG	EXH	TOTAL
LBS/DAY BY QUARTER												
Grubbing - 2023												
	ONSITE			0.92	18.31	19.24	0.00	0.86	0.86	0.00	0.86	0.86
	OFFSITE			0.05	0.04	0.09	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	2023 - Q1	62	0.98	18.35	19.33	0.15	0.86	1.01	0.04	0.86	0.90
Grubbing - 2023												
	ONSITE			0.92	18.31	19.24	0.00	0.86	0.86	0.00	0.86	0.86
	OFFSITE			0.05	0.03	0.08	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	2023- Q2	46	0.97	18.34	19.32	0.15	0.86	1.01	0.04	0.86	0.90
Site Prep - 2023												
	ONSITE			0.93	19.07	20.00	7.67	0.95	8.61	3.94	0.95	4.89
	OFFSITE			0.06	0.04	0.11	0.18	0.00	0.18	0.05	0.00	0.05
	TOTAL	2023 - Q1	45	0.99	19.11	20.10	7.84	0.95	8.79	3.99	0.95	4.93
Site Prep - 2023												
	ONSITE			0.93	19.07	20.00	7.67	0.95	8.61	3.94	0.95	4.89
	OFFSITE			0.06	0.04	0.09	0.18	0.00	0.18	0.05	0.00	0.05
	TOTAL	2023 - Q2	63	0.99	19.10	20.09	7.84	0.95	8.79	3.99	0.95	4.93
Grading - 2023												
	ONSITE			1.52	29.98	31.50	3.59	1.30	4.89	1.43	1.30	2.72
	OFFSITE			0.06	0.04	0.11	0.20	0.00	0.20	0.05	0.00	0.05
	TOTAL	2023 - Q3	63	1.59	30.02	31.61	3.79	1.30	5.09	1.48	1.30	2.78
Grading - 2023												
	Onsite			1.52	29.98	31.50	3.59	1.30	4.89	1.43	1.30	2.72
	Offsite			0.07	0.05	0.12	0.20	0.00	0.20	0.05	0.00	0.05
	Total	2023 - Q4	62	1.59	30.03	31.62	3.79	1.30	5.09	1.48	1.30	2.78
Building Construction - 2024												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			7.05	29.28	36.33	21.98	0.23	22.21	5.90	0.22	6.11
	TOTAL	2024 - Q1	62	7.72	43.51	51.23	21.98	1.13	23.12	5.90	1.12	7.02
Building Construction - 2024												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			6.45	27.97	34.42	21.98	0.23	22.21	5.90	0.22	6.11
	TOTAL	2024 - Q2	63	7.13	42.19	49.32	21.98	1.13	23.11	5.90	1.12	7.02
Building Construction - 2024												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			6.45	27.97	34.42	21.98	0.23	22.21	5.90	0.22	6.11
	TOTAL	2024 - Q3	63	7.13	42.19	49.32	21.98	1.13	23.11	5.90	1.12	7.02
Building Construction - 2024												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			7.05	29.28	36.33	21.98	0.23	22.21	5.90	0.22	6.11
	TOTAL	2024 - Q4	62	7.72	43.51	51.23	21.98	1.13	23.12	5.90	1.12	7.02
Building Construction - 2025												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			6.69	28.34	35.03	21.98	0.22	22.20	5.90	0.21	6.11
	TOTAL	2025 - Q1	62	7.37	42.57	49.93	21.98	1.13	23.11	5.90	1.11	7.01
Building Construction - 2025												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			6.11	27.08	33.20	21.98	0.22	22.20	5.90	0.21	6.11
	TOTAL	2025 - Q2	63	6.79	41.31	48.10	21.98	1.13	23.11	5.90	1.11	7.01
Building Construction - 2025												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			6.11	27.08	33.20	21.98	0.22	22.20	5.90	0.21	6.11
	TOTAL	2025 - Q3	63	6.79	41.31	48.10	21.98	1.13	23.11	5.90	1.11	7.01
Building Construction - 2025												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			6.69	28.34	35.03	21.98	0.22	22.20	5.90	0.21	6.11
	TOTAL	2025 - Q4	62	7.37	42.57	49.93	21.98	1.13	23.11	5.90	1.11	7.01
Building Construction - 2026												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			6.38	27.47	33.85	21.98	0.22	22.20	5.90	0.20	6.10
	TOTAL	2026 - Q1	62	7.05	41.70	48.75	21.98	1.12	23.10	5.90	1.11	7.00

Building Construction - 2026												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			5.82	26.26	32.08	21.98	0.21	22.20	5.90	0.20	6.10
	TOTAL	2026 - Q2	63	6.49	40.49	46.98	21.98	1.12	23.10	5.90	1.11	7.00
Building Construction - 2026												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			5.82	26.26	32.08	21.98	0.21	22.20	5.90	0.20	6.10
	TOTAL	2026 - Q3	63	6.49	40.49	46.98	21.98	1.12	23.10	5.90	1.11	7.00
Building Construction - 2026												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			6.38	27.47	33.85	21.98	0.22	22.20	5.90	0.20	6.10
	TOTAL	2026 - Q4	62	7.05	41.70	48.75	21.98	1.12	23.10	5.90	1.11	7.00
Building Construction - 2027												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			6.09	26.69	32.78	21.98	0.21	22.19	5.90	0.20	6.09
	TOTAL	2027 - Q1	62	6.76	40.91	47.68	21.98	1.11	23.09	5.90	1.10	7.00
Building Construction - 2027												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			5.54	25.52	31.06	21.98	0.21	22.19	5.90	0.19	6.09
	TOTAL	2027 - Q2	63	6.21	39.74	45.96	21.98	1.11	23.09	5.90	1.10	6.99
Building Construction - 2027												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			5.54	25.52	31.06	21.98	0.21	22.19	5.90	0.19	6.09
	TOTAL	2027 - Q3	63	6.21	39.74	45.96	21.98	1.11	23.09	5.90	1.10	6.99
Building Construction - 2027												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			6.09	26.69	32.78	21.98	0.21	22.19	5.90	0.20	6.09
	TOTAL	2027 - Q4	62	6.76	40.91	47.68	21.98	1.11	23.09	5.90	1.10	7.00
Building Construction - 2028												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			5.80	26.01	31.81	21.98	0.20	22.18	5.90	0.19	6.08
	TOTAL	2028 - Q1	62	6.47	40.24	46.71	21.98	1.10	23.09	5.90	1.09	6.99
Building Construction - 2028												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			5.27	24.88	30.15	21.98	0.20	22.18	5.90	0.19	6.08
	TOTAL	2028 - Q2	63	5.95	39.10	45.05	21.98	1.10	23.08	5.90	1.09	6.99
Building Construction - 2028												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			5.27	24.88	30.15	21.98	0.20	22.18	5.90	0.19	6.08
	TOTAL	2028 - Q3	63	5.95	39.10	45.05	21.98	1.10	23.08	5.90	1.09	6.99
Building Construction - 2028												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			5.80	26.01	31.81	21.98	0.20	22.18	5.90	0.19	6.08
	TOTAL	2028 - Q4	62	6.47	40.24	46.71	21.98	1.10	23.09	5.90	1.09	6.99
Building Construction - 2029												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			5.52	25.36	30.88	21.98	0.19	22.17	5.90	0.18	6.08
	TOTAL	2029 - Q1	62	6.19	39.59	45.78	21.98	1.10	23.08	5.90	1.08	6.98
Building Construction - 2029												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			5.01	24.26	29.27	21.98	0.19	22.17	5.90	0.18	6.08
	TOTAL	2029 - Q2	63	5.69	38.48	44.17	21.98	1.09	23.08	5.90	1.08	6.98
Building Construction - 2029												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			5.01	24.26	29.27	21.98	0.19	22.17	5.90	0.18	6.08
	TOTAL	2029 - Q3	63	5.69	38.48	44.17	21.98	1.09	23.08	5.90	1.08	6.98
Building Construction - 2029												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			5.52	25.36	30.88	21.98	0.19	22.17	5.90	0.18	6.08
	TOTAL	2029 - Q4	62	6.19	39.59	45.78	21.98	1.10	23.08	5.90	1.08	6.98
Building Construction - 2030												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			5.25	24.84	30.09	21.98	0.18	22.17	5.90	0.17	6.07
	TOTAL	2030 - Q1	62	5.92	39.07	44.99	21.98	1.09	23.07	5.90	1.08	6.97
Building Construction - 2030												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			4.76	23.76	28.53	21.98	0.18	22.17	5.90	0.17	6.07
	TOTAL	2030 - Q2	63	5.44	37.99	43.43	21.98	1.09	23.07	5.90	1.08	6.97

Building Construction - 2030												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			4.76	23.76	28.53	21.98	0.18	22.17	5.90	0.17	6.07
	TOTAL	2030 - Q3	63	5.44	37.99	43.43	21.98	1.09	23.07	5.90	1.08	6.97
Building Construction - 2030												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			5.25	24.84	30.09	21.98	0.18	22.17	5.90	0.17	6.07
	TOTAL	2030 - Q4	62	5.92	39.07	44.99	21.98	1.09	23.07	5.90	1.08	6.97
Arch Coating - 2024												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			1.27	0.82	2.09	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	2024 - Q1	23	39.01	2.17	41.18	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2024												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			1.15	0.72	1.87	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	2024 - Q2	63	38.88	2.08	40.96	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2024												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			1.15	0.72	1.87	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	2024 - Q3	63	38.88	2.08	40.96	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2024												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			1.27	0.82	2.09	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	2024 - Q4	62	39.01	2.17	41.18	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2025												
	ONSITE			37.74	1.36	0.00	0.05	0.05	0.10	0.00	0.10	0.10
	OFFSITE			1.20	0.73	1.94	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	2025 - Q1	62	38.94	2.09	41.03	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2025												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			1.08	0.65	1.73	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	2025 - Q2	63	38.82	2.00	40.82	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2025												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			1.08	0.65	1.73	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	2025 - Q3	63	38.82	2.00	40.82	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2025												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			1.20	0.73	1.94	3.82	0.02	3.83	1.01	0.02	1.03
	TOTAL	2025 - Q4	62	38.94	2.09	41.03	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2026												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			1.15	0.67	1.81	3.82	0.02	3.83	1.01	0.01	1.03
	TOTAL	2026 - Q1	62	38.88	2.02	40.90	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2026												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			1.03	0.59	1.61	3.82	0.02	3.83	1.01	0.01	1.03
	TOTAL	2026 - Q2	63	38.77	1.94	40.71	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2026												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			1.03	0.59	1.61	3.82	0.02	3.83	1.01	0.01	1.03
	TOTAL	2026 - Q3	63	38.77	1.94	40.71	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2026												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			1.15	0.67	1.81	3.82	0.02	3.83	1.01	0.01	1.03
	TOTAL	2026 - Q4	62	38.88	2.02	40.90	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2027												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			1.09	0.61	1.70	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	2027 - Q1	62	38.83	1.96	40.79	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2027												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.98	0.53	1.51	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	2027 - Q2	63	38.71	1.89	40.61	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2027												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.98	0.53	1.51	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	2027 - Q3	63	38.71	1.89	40.61	3.82	0.11	3.93	1.01	0.11	1.12

Arch Coating - 2027												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			1.09	0.61	1.70	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	2027 - Q4	62	38.83	1.96	40.79	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2028												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			1.04	0.56	1.59	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	2028 - Q1	62	38.77	1.91	40.69	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2028												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.93	0.49	1.42	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	2028 - Q2	63	38.66	1.85	40.51	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2028												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.93	0.49	1.42	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	2028 - Q3	63	38.66	1.85	40.51	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2028												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			1.04	0.56	1.59	3.82	0.01	3.83	1.01	0.01	1.03
	TOTAL	2028 - Q4	62	38.77	1.91	40.69	3.82	0.11	3.93	1.01	0.11	1.12
Arch Coating - 2029												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.98	0.52	1.50	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	2029 - Q1	62	38.72	1.87	40.59	3.82	0.11	3.92	1.01	0.11	1.12
Arch Coating - 2029												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.88	0.45	1.33	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	2029 - Q2	63	38.61	1.81	40.43	3.82	0.11	3.92	1.01	0.11	1.12
Arch Coating - 2029												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.88	0.45	1.33	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	2029 - Q3	63	38.61	1.81	40.43	3.82	0.11	3.92	1.01	0.11	1.12
Arch Coating - 2029												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.98	0.52	1.50	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	2029 - Q4	62	38.72	1.87	40.59	3.82	0.11	3.92	1.01	0.11	1.12
Arch Coating - 2030												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.93	0.48	1.41	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	2030 - Q1	62	38.67	1.84	40.51	3.82	0.11	3.92	1.01	0.11	1.12
Arch Coating - 2030												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.08	0.42	0.51	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	2030 - Q2	63	37.82	1.78	39.60	3.82	0.11	3.92	1.01	0.11	1.12
Arch Coating - 2030												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.08	0.42	0.51	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	2030 - Q3	63	37.82	1.78	39.60	3.82	0.11	3.92	1.01	0.11	1.12
Arch Coating - 2030												
	ONSITE			37.74	1.36	39.09	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.93	0.48	1.41	3.82	0.01	3.83	1.01	0.01	1.02
	TOTAL	2030 - Q4	62	38.67	1.84	40.51	3.82	0.11	3.92	1.01	0.11	1.12
Paving - 2030												
	ONSITE			0.56	11.30	11.86	0.00	0.61	0.61	0.00	0.61	0.61
	OFFSITE			0.04	0.02	0.05	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	2030 - Q1	42	0.60	11.31	11.91	0.15	0.61	0.76	0.04	0.61	0.65
Paving - 2030												
	ONSITE			0.56	11.30	11.86	0.00	0.61	0.61	0.00	0.61	0.61
	OFFSITE			0.03	0.02	0.05	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	2030 - Q2	63	0.59	11.31	11.90	0.15	0.61	0.76	0.04	0.61	0.65

Paving - 2030												
	ONSITE			0.56	11.30	11.86	0.00	0.61	0.61	0.00	0.61	0.61
	OFFSITE			0.03	0.02	0.05	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	2030 - Q3	63	0.59	11.31	11.90	0.15	0.61	0.76	0.04	0.61	0.65
Paving - 2030												
	ONSITE			0.56	11.30	11.86	0.00	0.61	0.61	0.00	0.61	0.61
	OFFSITE			0.04	0.02	0.05	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	2030 - Q4	42	0.60	11.31	11.91	0.15	0.61	0.76	0.04	0.61	0.65
Commercial and Educational - Building construction - 2024												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.55	2.79	3.33	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2024 - Q1	62	1.22	17.01	18.23	1.72	0.92	2.64	0.46	0.92	1.39
Commercial and Educational - Building construction - 2024												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.50	2.67	3.17	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2024 - Q2	63	1.17	16.89	18.07	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2024												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.50	2.67	3.17	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2024 - Q3	63	1.17	16.89	18.07	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2024												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.55	2.79	3.33	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2024 - Q4	62	1.22	17.01	18.23	1.72	0.92	2.64	0.46	0.92	1.39
Commercial and Educational - Building construction - 2025												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.52	2.70	3.22	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2025 - Q1	63	1.19	16.93	18.12	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2025												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.47	2.59	3.06	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2025 - Q2	63	1.15	16.82	17.96	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2025												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.47	2.59	3.06	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2025 - Q3	63	1.15	16.82	17.96	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2025												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.52	2.70	3.22	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2025 - Q4	62	1.19	16.93	18.12	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2026												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.49	2.63	3.12	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2026 - Q1	62	1.17	16.85	18.02	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2026												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.45	2.52	2.97	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2026 - Q2	63	1.13	16.74	17.87	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2026												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.45	2.52	2.97	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2026 - Q3	63	1.13	16.74	17.87	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2026												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.49	2.63	3.12	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2026 - Q4	62	1.17	16.85	18.02	1.72	0.92	2.64	0.46	0.92	1.38

Commercial and Educational - Building construction - 2027												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.47	2.55	3.03	1.71	0.02	1.74	0.46	0.02	0.48
	TOTAL	2027 - Q1	62	1.15	16.78	17.93	1.71	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2027												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.43	2.45	2.88	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2027 - Q2	63	1.11	16.67	17.78	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2027												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.43	2.45	2.88	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2027 - Q3	63	1.11	16.67	17.78	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2027												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.47	2.55	3.03	1.71	0.02	1.74	0.46	0.02	0.48
	TOTAL	2027 - Q4	62	1.15	16.78	17.93	1.71	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2028												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.45	2.49	2.94	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2028 - Q1	62	1.12	16.72	17.84	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2028												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.41	2.39	2.80	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2028 - Q2	63	1.08	16.62	17.70	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2028												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.41	2.39	2.80	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2028 - Q3	63	1.08	16.62	17.70	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2028												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.45	2.49	2.94	1.72	0.02	1.74	0.46	0.02	0.48
	TOTAL	2028 - Q4	62	1.12	16.72	17.84	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2029												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.43	2.44	2.86	1.72	0.02	1.73	0.46	0.02	0.48
	TOTAL	2029 - Q1	62	1.10	16.66	17.76	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2029												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.39	2.33	2.72	1.72	0.02	1.73	0.46	0.02	0.48
	TOTAL	2029 - Q2	63	1.06	16.56	17.62	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2029												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.39	2.33	2.72	1.72	0.02	1.73	0.46	0.02	0.48
	TOTAL	2029 - Q3	63	1.06	16.56	17.62	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Building construction - 2029												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.43	2.44	2.86	1.72	0.02	1.73	0.46	0.02	0.48
	TOTAL	2029 - Q4	42	1.10	16.66	17.76	1.72	0.92	2.64	0.46	0.92	1.38
Commercial and Educational - Arch Coating - 2024												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.09	0.05	0.14	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2024 - Q2	63	2.42	1.41	3.83	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2024												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.09	0.05	0.14	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2024 - Q3	63	2.42	1.41	3.83	0.29	0.10	0.38	0.08	0.10	0.17

Commercial and Educational - Arch Coating - 2024												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.10	0.06	0.16	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2024 - Q4	62	2.43	1.42	3.85	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2025												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.09	0.06	0.15	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2025 - Q1	62	2.42	1.41	3.83	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2025												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.08	0.05	0.13	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2025 - Q2	63	2.41	1.41	3.82	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2025												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.08	0.05	0.13	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2025 - Q3	63	2.41	1.41	3.82	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2025												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.09	0.06	0.15	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2025 - Q4	62	2.42	1.41	3.83	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2026												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.09	0.05	0.14	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2026 - Q1	62	2.42	1.41	3.83	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2026												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.08	0.04	0.12	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2026 - Q2	63	2.41	1.40	3.81	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2026												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.08	0.04	0.12	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2026 - Q3	63	2.41	1.40	3.81	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2026												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.08	0.04	0.12	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2026 - Q4	62	2.41	1.40	3.81	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2027												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.08	0.05	0.13	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2027 - Q1	62	2.41	1.40	3.82	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2027												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2027 - Q2	63	2.41	1.40	3.80	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2027												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2027 - Q3	63	2.41	1.40	3.80	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2027												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.08	0.05	0.13	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2027 - Q4	62	2.41	1.40	3.82	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2028												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.08	0.04	0.12	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2028 - Q1	62	2.41	1.40	3.81	0.29	0.10	0.38	0.08	0.10	0.17

Commercial and Educational - Arch Coating - 2028												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2028 - Q2	63	2.40	1.39	3.80	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2028												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2028 - Q3	63	2.40	1.39	3.80	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2028												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.08	0.04	0.12	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2028 - Q4	62	2.41	1.40	3.81	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2029												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2029 - Q1	62	2.41	1.40	3.80	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2029												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.07	0.03	0.10	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2029 - Q2	63	2.40	1.39	3.79	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2029												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.07	0.03	0.10	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2029 - Q3	63	2.40	1.39	3.79	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Arch Coating - 2029												
	ONSITE			2.33	1.36	3.69	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.07	0.04	0.11	0.29	0.00	0.29	0.08	0.00	0.08
	TOTAL	2029 - Q4	62	2.41	1.40	3.80	0.29	0.10	0.38	0.08	0.10	0.17
Commercial and Educational - Paving - 2029												
	ONSITE			2.75	11.30	14.04	0.00	0.61	0.61	0.00	0.61	0.61
	OFFSITE			0.04	0.02	0.06	0.15	0.00	0.15	0.04	0.00	0.04
	TOTAL	2029 - Q4	20	2.79	11.32	14.10	0.15	0.61	0.76	0.04	0.61	0.65
Hotel - Building Construction - 2026												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.08	0.43	0.52	0.29	0.00	0.30	0.08	0.00	0.08
	TOTAL	2026 - Q1	62	0.76	14.66	15.42	0.29	0.91	1.20	0.08	0.91	0.99
Hotel - Building Construction - 2026												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.08	0.41	0.49	0.29	0.00	0.30	0.08	0.00	0.08
	TOTAL	2026 - Q2	63	0.75	14.64	15.39	0.29	0.91	1.20	0.08	0.91	0.99
Hotel - Building Construction - 2026												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.08	0.41	0.49	0.29	0.00	0.30	0.08	0.00	0.08
	TOTAL	2026 - Q3	63	0.75	14.64	15.39	0.29	0.91	1.20	0.08	0.91	0.99
Hotel - Building Construction - 2026												
	ONSITE			0.67	14.23	14.90	0.00	0.90	0.90	0.00	0.90	0.90
	OFFSITE			0.08	0.43	0.52	0.29	0.00	0.30	0.08	0.00	0.08
	TOTAL	2026 - Q4	42	0.76	14.66	15.42	0.29	0.91	1.20	0.08	0.91	0.99
Hotel - Paving - 2026												
	ONSITE			0.44	9.09	9.53	0.00	0.52	0.52	0.00	0.52	0.52
	OFFSITE			0.06	0.03	0.09	0.20	0.00	0.20	0.05	0.00	0.05
	TOTAL	2026 - Q4	18	0.50	9.12	9.62	0.20	0.53	0.72	0.05	0.53	0.58
Hotel - Arch Coating - 2026												
	ONSITE			77.31	1.36	78.67	0.00	0.10	0.10	0.00	0.10	0.10
	OFFSITE			0.01	0.01	0.02	0.05	0.00	0.05	0.01	0.00	0.01
	TOTAL	2026 - Q4	18	77.32	1.37	78.69	0.05	0.10	0.14	0.01	0.10	0.11

EMISSIONS SUMMARY (LBS/QTR)

CONSTRUCTION ACTIVITY	EMISSIONS (LBS/QTR)						
		PM10			PM2.5		
	ROG+NOX	FUG	EXH	TOTAL	FUG	EXH	TOTAL
LBS/QUARTER							
Grubbing - 2023							
2023 - Q1	1198.18	9.19	53.53	62.73	2.44	53.53	55.97
Grubbing - 2023							
2023- Q2	888.55	6.82	39.72	46.54	1.81	39.71	41.52
Site Prep - 2023							
2023 - Q1	904.60	352.99	42.62	395.60	179.42	42.61	222.03
Site Prep - 2023							
2023 - Q2	1265.75	494.18	59.66	553.85	251.19	59.66	310.85
Grading - 2023							
2023 - Q3	1991.20	238.59	81.92	320.46	93.08	81.92	175.00
Grading - 2023							
2023 - Q4	1960.35	234.80	80.62	315.43	91.60	80.62	172.22
Building Construction - 2024							
2024 - Q1	3176.32	1362.83	70.30	1433.13	365.53	69.49	435.02
Building Construction - 2024							
2024 - Q2	3107.16	1384.81	71.39	1456.19	371.42	70.57	441.99
Building Construction - 2024							
2024 - Q3	3107.16	1384.81	71.39	1456.19	371.42	70.57	441.99
Building Construction - 2024							
2024 - Q4	3176.32	1362.83	70.30	1433.13	365.53	69.49	435.02
Building Construction - 2025							
2025 - Q1	3095.88	1362.85	69.85	1432.70	365.54	69.07	434.61

Building Construction - 2025

2025 - Q2	3030.11	1384.83	70.93	1455.75	371.44	70.14	441.57

Building Construction - 2025

2025 - Q3	3030.11	1384.83	70.93	1455.75	371.44	70.14	441.57

Building Construction - 2025

2025 - Q4	3095.88	1362.85	69.85	1432.70	365.54	69.07	434.61

Building Construction - 2026

2026 - Q1	3022.78	1362.87	69.37	1432.24	365.55	68.62	434.16

Building Construction - 2026

2026 - Q2	2959.78	1384.85	70.45	1455.29	371.44	69.68	441.12

Building Construction - 2026

2026 - Q3	2959.78	1384.85	70.45	1455.29	371.44	69.68	441.12

Building Construction - 2026

2026 - Q4	3022.78	1362.87	69.37	1432.24	365.55	68.62	434.16

Building Construction - 2027

2027 - Q1	2955.86	1362.88	68.87	1431.75	365.55	68.15	433.70

Building Construction - 2027

2027 - Q2	2895.37	1384.87	69.94	1454.81	371.45	69.21	440.60

Building Construction - 2027

2027 - Q3	2895.37	1384.87	69.94	1454.81	371.45	69.21	440.60

Building Construction - 2027

2027 - Q4	2955.86	1362.88	68.87	1431.75	365.55	68.15	433.70

Building Construction - 2028

2028 - Q1	2896.26	1362.90	68.39	1431.29	365.56	67.69	433.25

Building Construction - 2028

2028 - Q2	2838.24	1384.88	69.45	1454.33	371.45	68.75	440.20

Building Construction - 2028

2028 - Q3	2838.24	1384.88	69.45	1454.33	371.45	68.75	440.20

Building Construction - 2028

2028 - Q4	2896.26	1362.90	68.39	1431.29	365.56	67.69	433.25

Building Construction - 2029

2029 - Q1	2838.49	1362.92	67.91	1430.82	365.56	67.25	432.80

Building Construction - 2029

2029 - Q2	2782.76	1384.90	68.97	1453.86	371.46	68.29	439.75

Building Construction - 2029

2029 - Q3	2782.76	1384.90	68.97	1453.86	371.46	68.29	439.75

Building Construction - 2029

2029 - Q4	2838.49	1362.92	67.91	1430.82	365.56	67.25	432.80

Building Construction - 2030

2030 - Q1	2789.50	1362.93	67.48	1430.41	365.57	66.85	432.41

Building Construction - 2030

2030 - Q2	2735.89	1384.91	68.54	1453.45	371.47	67.90	439.36

Building Construction - 2030

2030 - Q3	2735.89	1384.91	68.54	1453.45	371.47	67.90	439.36

Building Construction - 2030

2030 - Q4	2789.50	1362.93	67.48	1430.41	365.57	66.85	432.41

Arch Coating - 2024

2024 - Q1	947.16	87.77	2.59	90.36	23.28	2.56	25.83

Arch Coating - 2024

2024 - Q2	2580.51	240.41	7.09	247.50	63.76	7.00	70.76

Arch Coating - 2024

2024 - Q3	2580.51	240.41	7.09	247.50	63.76	7.00	70.76

Arch Coating - 2024

2024 - Q4	2553.22	236.60	6.98	243.57	62.75	6.89	69.64

Arch Coating - 2025

2025 - Q1	2543.94	236.60	6.93	243.52	62.75	6.84	69.60

Arch Coating - 2025

2025 - Q2	2571.92	240.41	7.04	247.45	63.76	6.96	70.72

Arch Coating - 2025

2025 - Q3	2571.92	240.41	7.04	247.45	63.76	6.96	70.72

Arch Coating - 2025

2025 - Q4	2543.94	236.60	6.93	243.52	62.75	6.84	69.60

Arch Coating - 2026

2026 - Q1	2536.09	236.60	6.88	243.47	62.75	6.80	69.55

Arch Coating - 2026

2026 - Q2	2564.64	240.41	6.99	247.40	63.76	6.91	70.67

Arch Coating - 2026

2026 - Q3	2564.64	240.41	6.99	247.40	63.76	6.91	70.67

Arch Coating - 2026

2026 - Q4	2536.09	236.60	6.88	243.47	62.75	6.80	69.55

Arch Coating - 2027

2027 - Q1	2529.09	236.60	6.82	243.42	62.75	6.75	69.50

Arch Coating - 2027

2027 - Q2	2558.15	240.41	6.93	247.34	63.76	6.85	70.62

Arch Coating - 2027

2027 - Q3	2558.15	240.41	6.93	247.34	63.76	6.85	70.62

Arch Coating - 2027

2027 - Q4	2529.09	236.60	6.82	243.42	62.75	6.75	69.50

Arch Coating - 2028

2028 - Q1	2522.70	236.60	6.76	243.36	62.75	6.70	69.45

Arch Coating - 2028

2028 - Q2	2552.25	240.41	6.87	247.28	63.76	6.80	70.57

Arch Coating - 2028

2028 - Q3	2552.25	240.41	6.87	247.28	63.76	6.80	70.57

Arch Coating - 2028

2028 - Q4	2522.70	236.60	6.76	243.36	62.75	6.70	69.45

Arch Coating - 2029

2029 - Q1	2516.82	236.60	6.71	243.31	62.75	6.65	69.40

Arch Coating - 2029

2029 - Q2	2546.83	240.41	6.82	247.23	63.76	6.75	70.52

Arch Coating - 2029

2029 - Q3	2546.83	240.41	6.82	247.23	63.76	6.75	70.52

Arch Coating - 2029

2029 - Q4	2516.82	236.60	6.71	243.31	62.75	6.65	69.40

Arch Coating - 2030

2030 - Q1	2511.42	236.60	6.66	243.25	62.75	6.60	69.35

Arch Coating - 2030

2030 - Q2	2494.79	240.41	6.77	247.17	63.76	6.70	70.47

Arch Coating - 2030

2030 - Q3	2494.79	240.41	6.77	247.17	63.76	6.70	70.47

Arch Coating - 2030

2030 - Q4	2511.42	236.60	6.66	243.25	62.75	6.60	69.35

Paving - 2030

2030 - Q1	500.26	6.23	25.61	31.84	1.65	25.61	27.26

Paving - 2030

2030 - Q2	750.00	9.34	38.42	47.76	2.48	38.41	40.89

Paving - 2030

2030 - Q3	750.00	9.34	38.42	47.76	2.48	38.41	40.89

Paving - 2030

2030 - Q4	500.26	6.23	25.61	31.84	1.65	25.61	27.26

Commercial and Educational - Building construction - 2024

2024 - Q1	1130.32	106.45	57.30	163.75	28.64	57.23	85.87

Commercial and Educational - Building construction - 2024

2024 - Q2	1138.32	108.17	58.22	166.39	29.10	58.15	87.25

Commercial and Educational - Building construction - 2024

2024 - Q3	1138.32	108.17	58.22	166.39	29.10	58.15	87.25

Commercial and Educational - Building construction - 2024

2024 - Q4	1130.32	106.45	57.30	163.75	28.64	57.23	85.87

Commercial and Educational - Building construction - 2025

2025 - Q1	1141.60	108.17	58.19	166.36	29.10	58.12	87.22

Commercial and Educational - Building construction - 2025

2025 - Q2	1131.74	108.17	58.18	166.35	29.10	58.11	87.21

Commercial and Educational - Building construction - 2025

2025 - Q3	1131.74	108.17	58.18	166.35	29.10	58.11	87.21

Commercial and Educational - Building construction - 2025

2025 - Q4	1123.48	106.45	57.26	163.72	28.64	57.20	85.83

Commercial and Educational - Building construction - 2026

2026 - Q1	1117.20	106.45	57.22	163.67	28.64	57.16	85.80

Commercial and Educational - Building construction - 2026

2026 - Q2	1125.68	108.17	58.14	166.31	29.10	58.07	87.17

Commercial and Educational - Building construction - 2026

2026 - Q3	1125.68	108.17	58.14	166.31	29.10	58.07	87.17

Commercial and Educational - Building construction - 2026

2026 - Q4	1117.20	106.45	57.22	163.67	28.64	57.16	85.80

Commercial and Educational - Building construction - 2027

2027 - Q1	1111.44	106.02	57.18	163.64	28.64	57.11	85.75

Commercial and Educational - Building construction - 2027

2027 - Q2	1120.10	108.17	58.10	166.27	29.10	58.04	87.14

Commercial and Educational - Building construction - 2027

2027 - Q3	1120.10	108.17	58.10	166.27	29.10	58.04	87.14

Commercial and Educational - Building construction - 2027

2027 - Q4	1111.44	106.02	57.18	163.64	28.64	57.11	85.75

Commercial and Educational - Building construction - 2028

2028 - Q1	1106.32	106.46	57.14	163.60	28.64	57.08	85.72

Commercial and Educational - Building construction - 2028

2028 - Q2	1115.16	108.18	58.05	166.23	29.10	58.00	87.09

Commercial and Educational - Building construction - 2028

2028 - Q3	1115.16	108.18	58.05	166.23	29.10	58.00	87.09

Commercial and Educational - Building construction - 2028

2028 - Q4	1106.32	106.46	57.14	163.60	28.64	57.08	85.72

Commercial and Educational - Building construction - 2029

2029 - Q1	1101.32	106.46	57.10	163.56	28.64	57.04	85.68

Commercial and Educational - Building construction - 2029

2029 - Q2	1110.34	108.17	58.02	166.19	29.10	57.95	87.05

Commercial and Educational - Building construction - 2029

2029 - Q3	1110.34	108.17	58.02	166.19	29.10	57.95	87.05

Commercial and Educational - Building construction - 2029

2029 - Q4	746.06	72.12	38.68	110.80	19.40	38.64	58.04

Commercial and Educational - Arch Coating - 2024

2024 - Q2	241.26	18.06	6.07	24.14	4.79	6.07	10.85

Commercial and Educational - Arch Coating - 2024

2024 - Q3	241.26	18.06	6.07	24.14	4.79	6.07	10.85

Commercial and Educational - Arch Coating - 2024

2024 - Q4	238.46	17.78	5.98	23.75	4.71	5.97	10.68

Commercial and Educational - Arch Coating - 2025

2025 - Q1	237.76	17.78	5.97	23.75	4.71	5.97	10.68

Commercial and Educational - Arch Coating - 2025

2025 - Q2	240.62	18.06	6.07	24.14	4.79	6.06	10.85

Commercial and Educational - Arch Coating - 2025

2025 - Q3	240.62	18.06	6.07	24.14	4.79	6.06	10.85

Commercial and Educational - Arch Coating - 2025

2025 - Q4	237.76	17.78	5.97	23.75	4.71	5.97	10.68

Commercial and Educational - Arch Coating - 2026

2026 - Q1	237.17	17.78	5.97	23.75	4.71	5.96	10.68

Commercial and Educational - Arch Coating - 2026

2026 - Q2	240.07	18.06	6.07	24.13	4.79	6.06	10.85

Commercial and Educational - Arch Coating - 2026

2026 - Q3	240.07	18.06	6.07	24.13	4.79	6.06	10.85

Commercial and Educational - Arch Coating - 2026

2026 - Q4	236.26	17.78	5.97	23.75	4.71	5.96	10.68

Commercial and Educational - Arch Coating - 2027

2027 - Q1	236.65	17.78	5.97	23.74	4.71	5.96	10.68

Commercial and Educational - Arch Coating - 2027

2027 - Q2	239.58	18.06	6.07	24.12	4.79	6.06	10.85

Commercial and Educational - Arch Coating - 2027

2027 - Q3	239.58	18.06	6.07	24.12	4.79	6.06	10.85

Commercial and Educational - Arch Coating - 2027

2027 - Q4	236.65	17.78	5.97	23.74	4.71	5.96	10.68

Commercial and Educational - Arch Coating - 2028

2028 - Q1	236.17	17.78	5.96	23.74	4.71	5.96	10.67

Commercial and Educational - Arch Coating - 2028

2028 - Q2	239.14	18.06	6.06	24.12	4.79	6.05	10.84

Commercial and Educational - Arch Coating - 2028

2028 - Q3	239.14	18.06	6.06	24.12	4.79	6.05	10.84

Commercial and Educational - Arch Coating - 2028

2028 - Q4	236.17	17.78	5.96	23.74	4.71	5.96	10.67

Commercial and Educational - Arch Coating - 2029

2029 - Q1	235.72	17.78	5.96	23.73	4.71	5.95	10.67

Commercial and Educational - Arch Coating - 2029

2029 - Q2	238.73	18.06	6.05	24.12	4.79	6.05	10.84

Commercial and Educational - Arch Coating - 2029

2029 - Q3	238.73	18.06	6.05	24.12	4.79	6.05	10.84

Commercial and Educational - Arch Coating - 2029

2029 - Q4	235.72	17.78	5.96	23.73	4.71	5.95	10.67

Commercial and Educational - Paving - 2029

2029 - Q4	282.05	2.97	12.20	15.16	0.79	12.20	12.98

Hotel - Building Construction - 2026

2026 - Q1	955.86	18.20	56.22	74.43	4.89	56.21	61.11

Hotel - Building Construction - 2026

2026 - Q2	969.68	18.50	57.13	75.63	4.97	57.12	62.09

Hotel - Building Construction - 2026

2026 - Q3	969.68	18.50	57.13	75.63	4.97	57.12	62.09

Hotel - Building Construction - 2026

2026 - Q4	647.52	12.33	38.09	50.42	3.31	38.08	41.40

Hotel - Paving - 2026

2026 - Q4	173.19	3.56	9.46	13.02	0.94	9.46	10.40

Hotel - Arch Coating - 2026

2026 - Q4	1416.42	0.89	1.72	2.60	0.24	1.72	1.95

EMISSIONS SUMMARY (TONS/QTR)

CONSTRUCTION ACTIVITY		EMISSIONS (TONS/QTR)						
			PM10			PM2.5		
		ROG+NOX	FUG	EXH	TOTAL	FUG	EXH	TOTAL
TONS/QTR								
Grubbing - 2023				0.027				
				0.000				
	2023 - Q1	0.599	0.005	0.027	0.031	0.001	0.027	0.028
Grubbing - 2023				0.020				
				0.000				
	2023- Q2	0.444	0.003	0.020	0.023	0.001	0.020	0.021
Site Prep - 2023				0.021				
				0.000				
	2023 - Q1	0.452	0.176	0.021	0.198	0.090	0.021	0.111
Site Prep - 2023				0.030				
				0.000				
	2023 - Q2	0.633	0.247	0.030	0.277	0.126	0.030	0.155
Grading - 2023				0.041				
				0.000				
	2023 - Q3	0.996	0.119	0.041	0.160	0.047	0.041	0.087
Grading - 2023				0.040				
				0.000				
	2023 - Q4	0.980	0.117	0.040	0.158	0.046	0.040	0.086
Building Construction - 2024				0.028				
				0.007				
	2024 - Q1	1.588	0.681	0.035	0.717	0.183	0.035	0.218
Building Construction - 2024				0.028				
				0.007				
	2024 - Q2	1.554	0.692	0.036	0.728	0.186	0.035	0.221
Building Construction - 2024				0.028				
				0.007				
	2024 - Q3	1.554	0.692	0.036	0.728	0.186	0.035	0.221
Building Construction - 2024				0.028				
				0.007				
	2024 - Q4	1.588	0.681	0.035	0.717	0.183	0.035	0.218
Building Construction - 2025				0.028				
				0.007				
	2025 - Q1	1.548	0.681	0.035	0.716	0.183	0.035	0.217

Building Construction - 2025

			0.028				
			0.007				
2025 - Q2	1.515	0.692	0.035	0.728	0.186	0.035	0.221

Building Construction - 2025

			0.028				
			0.007				
2025 - Q3	1.515	0.692	0.035	0.728	0.186	0.035	0.221

Building Construction - 2025

			0.028				
			0.007				
2025 - Q4	1.548	0.681	0.035	0.716	0.183	0.035	0.217

Building Construction - 2026

			0.028				
			0.007				
2026 - Q1	1.511	0.681	0.035	0.716	0.183	0.034	0.217

Building Construction - 2026

			0.028				
			0.007				
2026 - Q2	1.480	0.692	0.035	0.728	0.186	0.035	0.221

Building Construction - 2026

			0.028				
			0.007				
2026 - Q3	1.480	0.692	0.035	0.728	0.186	0.035	0.221

Building Construction - 2026

			0.028				
			0.007				
2026 - Q4	1.511	0.681	0.035	0.716	0.183	0.034	0.217

Building Construction - 2027

			0.028				
			0.006				
2027 - Q1	1.478	0.681	0.034	0.716	0.183	0.034	0.217

Building Construction - 2027

			0.028				
			0.007				
2027 - Q2	1.448	0.692	0.035	0.727	0.186	0.035	0.220

Building Construction - 2027

			0.028				
			0.007				
2027 - Q3	1.448	0.692	0.035	0.727	0.186	0.035	0.220

Building Construction - 2027

			0.028				
			0.006				
2027 - Q4	1.478	0.681	0.034	0.716	0.183	0.034	0.217

Building Construction - 2028

			0.028				
			0.006				
2028 - Q1	1.448	0.681	0.034	0.716	0.183	0.034	0.217

Building Construction - 2028

			0.028				
			0.006				
2028 - Q2	1.419	0.692	0.035	0.727	0.186	0.034	0.220

Building Construction - 2028

			0.028				
			0.006				
2028 - Q3	1.419	0.692	0.035	0.727	0.186	0.034	0.220

Building Construction - 2028

			0.028				
			0.006				
2028 - Q4	1.448	0.681	0.034	0.716	0.183	0.034	0.217

Building Construction - 2029

			0.028				
			0.006				
2029 - Q1	1.419	0.681	0.034	0.715	0.183	0.034	0.216

Building Construction - 2029

			0.028				
			0.006				
2029 - Q2	1.391	0.692	0.034	0.727	0.186	0.034	0.220

Building Construction - 2029

			0.028				
			0.006				
2029 - Q3	1.391	0.692	0.034	0.727	0.186	0.034	0.220

Building Construction - 2029

			0.028				
			0.006				
2029 - Q4	1.419	0.681	0.034	0.715	0.183	0.034	0.216

Building Construction - 2030

			0.028				
			0.006				
2030 - Q1	1.395	0.681	0.034	0.715	0.183	0.033	0.216

Building Construction - 2030

			0.028				
			0.006				
2030 - Q2	1.368	0.692	0.034	0.727	0.186	0.034	0.220

Building Construction - 2030

			0.028				
			0.006				
2030 - Q3	1.368	0.692	0.034	0.727	0.186	0.034	0.220

Building Construction - 2030

			0.028				
			0.006				
2030 - Q4	1.395	0.681	0.034	0.715	0.183	0.033	0.216

Arch Coating - 2024

			0.001				
			0.000				
2024 - Q1	0.474	0.044	0.001	0.045	0.012	0.001	0.013

Arch Coating - 2024

			0.003				
			0.001				
2024 - Q2	1.290	0.120	0.004	0.124	0.032	0.003	0.035

Arch Coating - 2024

			0.003				
			0.001				
2024 - Q3	1.290	0.120	0.004	0.124	0.032	0.003	0.035

Arch Coating - 2024

			0.003				
			0.001				
2024 - Q4	1.277	0.118	0.003	0.122	0.031	0.003	0.035

Arch Coating - 2025

			0.002				
			0.001				
2025 - Q1	1.272	0.118	0.003	0.122	0.031	0.003	0.035

Arch Coating - 2025

			0.003				
			0.001				
2025 - Q2	1.286	0.120	0.004	0.124	0.032	0.003	0.035

Arch Coating - 2025

			0.003				
			0.001				
2025 - Q3	1.286	0.120	0.004	0.124	0.032	0.003	0.035

Arch Coating - 2025

			0.003				
			0.001				
2025 - Q4	1.272	0.118	0.003	0.122	0.031	0.003	0.035

Arch Coating - 2026

			0.003				
			0.000				
2026 - Q1	1.268	0.118	0.003	0.122	0.031	0.003	0.035

Arch Coating - 2026

			0.003				
			0.000				
2026 - Q2	1.282	0.120	0.003	0.124	0.032	0.003	0.035

Arch Coating - 2026

			0.003				
			0.000				
2026 - Q3	1.282	0.120	0.003	0.124	0.032	0.003	0.035

Arch Coating - 2026

			0.003				
			0.000				
2026 - Q4	1.268	0.118	0.003	0.122	0.031	0.003	0.035

Arch Coating - 2027

			0.003				
			0.000				
2027 - Q1	1.265	0.118	0.003	0.122	0.031	0.003	0.035

Arch Coating - 2027

			0.003				
			0.000				
2027 - Q2	1.279	0.120	0.003	0.124	0.032	0.003	0.035

Arch Coating - 2027

			0.003				
			0.000				
2027 - Q3	1.279	0.120	0.003	0.124	0.032	0.003	0.035

Arch Coating - 2027

			0.003				
			0.000				
2027 - Q4	1.265	0.118	0.003	0.122	0.031	0.003	0.035

Arch Coating - 2028

			0.003				
			0.000				
2028 - Q1	1.261	0.118	0.003	0.122	0.031	0.003	0.035

Arch Coating - 2028

			0.003				
			0.000				
2028 - Q2	1.276	0.120	0.003	0.124	0.032	0.003	0.035

Arch Coating - 2028

			0.003				
			0.000				
2028 - Q3	1.276	0.120	0.003	0.124	0.032	0.003	0.035

Arch Coating - 2028

			0.003				
			0.000				
2028 - Q4	1.261	0.118	0.003	0.122	0.031	0.003	0.035

Arch Coating - 2029

			0.003				
			0.000				
2029 - Q1	1.258	0.118	0.003	0.122	0.031	0.003	0.035

Arch Coating - 2029

			0.003				
			0.000				
2029 - Q2	1.273	0.120	0.003	0.124	0.032	0.003	0.035

Arch Coating - 2029

			0.003				
			0.000				
2029 - Q3	1.273	0.120	0.003	0.124	0.032	0.003	0.035

Arch Coating - 2029

			0.003				
			0.000				
2029 - Q4	1.258	0.118	0.003	0.122	0.031	0.003	0.035

Arch Coating - 2030

			0.003				
			0.000				
2030 - Q1	1.256	0.118	0.003	0.122	0.031	0.003	0.035

Arch Coating - 2030

			0.003				
			0.000				
2030 - Q2	1.247	0.120	0.003	0.124	0.032	0.003	0.035

Arch Coating - 2030

			0.003				
			0.000				
2030 - Q3	1.247	0.120	0.003	0.124	0.032	0.003	0.035

Arch Coating - 2030

			0.003				
			0.000				
2030 - Q4	1.256	0.118	0.003	0.122	0.031	0.003	0.035

Paving - 2030

			0.013				
			0.000				
2030 - Q1	0.250	0.003	0.013	0.016	0.001	0.013	0.014

Paving - 2030

			0.019				
			0.000				
2030 - Q2	0.375	0.005	0.019	0.024	0.001	0.019	0.020

Paving - 2030

			0.019				
			0.000				
2030 - Q3	0.375	0.005	0.019	0.024	0.001	0.019	0.020

Paving - 2030

			0.013				
			0.000				
2030 - Q4	0.250	0.003	0.013	0.016	0.001	0.013	0.014

Commercial and Educational - Building construction - 2024

			0.028				
			0.001				
2024 - Q1	0.565	0.053	0.029	0.082	0.014	0.029	0.043

Commercial and Educational - Building construction - 2024

			0.028				
			0.001				
2024 - Q2	0.569	0.054	0.029	0.083	0.015	0.029	0.044

Commercial and Educational - Building construction - 2024

			0.028				
			0.001				
2024 - Q3	0.569	0.054	0.029	0.083	0.015	0.029	0.044

Commercial and Educational - Building construction - 2024

			0.028				
			0.001				
2024 - Q4	0.565	0.053	0.029	0.082	0.014	0.029	0.043

Commercial and Educational - Building construction - 2025

			0.028				
			0.001				
2025 - Q1	0.571	0.054	0.029	0.083	0.015	0.029	0.044

Commercial and Educational - Building construction - 2025

			0.028				
			0.001				
2025 - Q2	0.566	0.054	0.029	0.083	0.015	0.029	0.044

Commercial and Educational - Building construction - 2025

			0.028				
			0.001				
2025 - Q3	0.566	0.054	0.029	0.083	0.015	0.029	0.044

Commercial and Educational - Building construction - 2025

			0.028				
			0.001				
2025 - Q4	0.562	0.053	0.029	0.082	0.014	0.029	0.043

Commercial and Educational - Building construction - 2026

			0.028				
			0.001				
2026 - Q1	0.559	0.053	0.029	0.082	0.014	0.029	0.043

Commercial and Educational - Building construction - 2026

			0.028				
			0.001				
2026 - Q2	0.563	0.054	0.029	0.083	0.015	0.029	0.044

Commercial and Educational - Building construction - 2026

			0.028				
			0.001				
2026 - Q3	0.563	0.054	0.029	0.083	0.015	0.029	0.044

Commercial and Educational - Building construction - 2026

			0.028				
			0.001				
2026 - Q4	0.559	0.053	0.029	0.082	0.014	0.029	0.043

Commercial and Educational - Building construction - 2027

			0.028				
			0.001				
2027 - Q1	0.556	0.053	0.029	0.082	0.014	0.029	0.043

Commercial and Educational - Building construction - 2027

			0.028				
			0.001				
2027 - Q2	0.560	0.054	0.029	0.083	0.015	0.029	0.044

Commercial and Educational - Building construction - 2027

			0.028				
			0.001				
2027 - Q3	0.560	0.054	0.029	0.083	0.015	0.029	0.044

Commercial and Educational - Building construction - 2027

			0.028				
			0.001				
2027 - Q4	0.556	0.053	0.029	0.082	0.014	0.029	0.043

Commercial and Educational - Building construction - 2028

			0.028				
			0.001				
2028 - Q1	0.553	0.053	0.029	0.082	0.014	0.029	0.043

Commercial and Educational - Building construction - 2028

			0.028				
			0.001				
2028 - Q2	0.558	0.054	0.029	0.083	0.015	0.029	0.044

Commercial and Educational - Building construction - 2028

			0.028				
			0.001				
2028 - Q3	0.558	0.054	0.029	0.083	0.015	0.029	0.044

Commercial and Educational - Building construction - 2028

			0.028				
			0.001				
2028 - Q4	0.553	0.053	0.029	0.082	0.014	0.029	0.043

Commercial and Educational - Building construction - 2029

			0.028				
			0.001				
2029 - Q1	0.551	0.053	0.029	0.082	0.014	0.029	0.043

Commercial and Educational - Building construction - 2029

			0.028				
			0.001				
2029 - Q2	0.555	0.054	0.029	0.083	0.015	0.029	0.044

Commercial and Educational - Building construction - 2029

			0.028				
			0.001				
2029 - Q3	0.555	0.054	0.029	0.083	0.015	0.029	0.044

Commercial and Educational - Building construction - 2029

			0.019				
			0.000				
2029 - Q4	0.373	0.036	0.019	0.055	0.010	0.019	0.029

Commercial and Educational - Arch Coating - 2024

			0.003				
			0.000				
2024 - Q2	0.121	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2024

			0.003				
			0.000				
2024 - Q3	0.121	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2024

			0.003				
			0.000				
2024 - Q4	0.119	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2025

			0.003				
			0.000				
2025 - Q1	0.119	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2025

			0.003				
			0.000				
2025 - Q2	0.120	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2025

			0.003				
			0.000				
2025 - Q3	0.120	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2025

			0.003				
			0.000				
2025 - Q4	0.119	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2026

			0.003				
			0.000				
2026 - Q1	0.119	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2026

			0.003				
			0.000				
2026 - Q2	0.120	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2026

			0.003				
			0.000				
2026 - Q3	0.120	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2026

			0.003				
			0.000				
2026 - Q4	0.118	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2027

			0.003				
			0.000				
2027 - Q1	0.118	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2027

			0.003				
			0.000				
2027 - Q2	0.120	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2027

			0.003				
			0.000				
2027 - Q3	0.120	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2027

			0.003				
			0.000				
2027 - Q4	0.118	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2028

			0.003				
			0.000				
2028 - Q1	0.118	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2028

			0.003				
			0.000				
2028 - Q2	0.120	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2028

			0.003				
			0.000				
2028 - Q3	0.120	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2028

			0.003				
			0.000				
2028 - Q4	0.118	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2029

			0.003				
			0.000				
2029 - Q1	0.118	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2029

			0.003				
			0.000				
2029 - Q2	0.119	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2029

			0.003				
			0.000				
2029 - Q3	0.119	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Arch Coating - 2029

			0.003				
			0.000				
2029 - Q4	0.118	0.009	0.003	0.012	0.002	0.003	0.005

Commercial and Educational - Paving - 2029

			0.006				
			0.000				
2029 - Q4	0.141	0.001	0.006	0.008	0.000	0.006	0.006

Hotel - Building Construction - 2026

			0.028				
			0.000				
2026 - Q1	0.478	0.009	0.028	0.037	0.002	0.028	0.031

Hotel - Building Construction - 2026

			0.028				
			0.000				
2026 - Q2	0.485	0.009	0.029	0.038	0.002	0.029	0.031

Hotel - Building Construction - 2026

			0.028				
			0.000				
2026 - Q3	0.485	0.009	0.029	0.038	0.002	0.029	0.031

Hotel - Building Construction - 2026

			0.019				
			0.000				
2026 - Q4	0.324	0.006	0.019	0.025	0.002	0.019	0.021

Hotel - Paving - 2026

			0.005				
			0.000				
2026 - Q4	0.087	0.002	0.005	0.007	0.000	0.005	0.005

Hotel - Arch Coating - 2026

			0.001				
			0.000				
2026 - Q4	0.708	0.000	0.001	0.001	0.000	0.001	0.001

EMISSIONS SUMMARY (TONS/QTR COMPARED TO THRESHOLDS)

	EMISSIONS (TONS/QTR)						
		PM10			PM2.5		
CONSTRUCTION QUARTER	ROG+NOX	FUG	EXH	TOTAL	FUG	EXH	TOTAL
2023 Q1	1.05	0.18	0.05	0.23	0.09	0.05	0.14
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	No / No	No	No				
2023 Q2	1.08	0.25	0.05	0.30	0.13	0.05	0.18
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				
2023 Q3	1.00	0.12	0.04	0.16	0.05	0.04	0.09
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	No / No	No	No				
2023 Q4	0.98	0.12	0.04	0.16	0.05	0.04	0.09
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	No / No	No	No				
2024 Q1	2.63	0.78	0.07	0.84	0.21	0.06	0.27
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				
2024 Q2	3.53	0.88	0.07	0.95	0.23	0.07	0.31
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				
2024 Q3	3.53	0.88	0.07	0.95	0.23	0.07	0.31
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				
2024 Q4	3.55	0.86	0.07	0.93	0.23	0.07	0.30
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				
2025 Q1	3.51	0.86	0.07	0.93	0.23	0.07	0.30
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				
2025 Q2	3.49	0.88	0.07	0.95	0.23	0.07	0.31
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				
2025 Q3	3.49	0.88	0.07	0.95	0.23	0.07	0.31
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				
2025 Q4	3.50	0.86	0.07	0.93	0.23	0.07	0.30
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				
2026 Q1	3.93	0.87	0.10	0.97	0.23	0.10	0.33
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				
2026 Q2	3.93	0.88	0.10	0.98	0.24	0.10	0.34
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				
2026 Q3	3.93	0.88	0.10	0.98	0.24	0.10	0.34
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				
2026 Q4	4.57	0.87	0.09	0.96	0.23	0.09	0.33
TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?	Yes / No	No	No				

2027	Q1	3.42	0.86	0.07	0.93	0.23	0.07	0.30
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				
2027	Q2	3.41	0.88	0.07	0.95	0.23	0.07	0.30
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				
2027	Q3	3.41	0.88	0.07	0.95	0.23	0.07	0.30
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				
2027	Q4	3.42	0.86	0.07	0.93	0.23	0.07	0.30
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				
2028	Q1	3.38	0.86	0.07	0.93	0.23	0.07	0.30
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				
2028	Q2	3.37	0.88	0.07	0.95	0.23	0.07	0.30
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				
2028	Q3	3.37	0.88	0.07	0.95	0.23	0.07	0.30
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				
2028	Q4	3.38	0.86	0.07	0.93	0.23	0.07	0.30
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				
2029	Q1	3.35	0.86	0.07	0.93	0.23	0.07	0.30
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				
2029	Q2	3.34	0.88	0.07	0.95	0.23	0.07	0.30
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				
2029	Q3	3.34	0.88	0.07	0.95	0.23	0.07	0.30
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				
2029	Q4	3.31	0.85	0.07	0.91	0.23	0.07	0.29
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				
2030	Q1	2.90	0.80	0.05	0.85	0.21	0.05	0.26
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				
2030	Q2	2.99	0.82	0.06	0.87	0.22	0.06	0.28
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				
2030	Q3	2.99	0.82	0.06	0.87	0.22	0.06	0.28
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				
2030	Q4	2.90	0.80	0.05	0.85	0.21	0.05	0.26
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				

Dana Reserve Residential - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dana Reserve Residential

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	55.20	Acre	55.20	2,404,512.00	0
Apartments Low Rise	610.00	Dwelling Unit	23.50	610,000.00	1745
Single Family Housing	833.00	Dwelling Unit	149.50	1,499,400.00	2382

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2031
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	118.62	**CH4 Intensity (lb/MWhr)**	0.019	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Utility Intensity Factor based on renewable portfolio standars for PG&E for the year of 2031.

Land Use - Apartment Low Rise land use also includes 152 accessory dwelling units (ADU's) as per the traffic report. Lot acreage based on specific plan, other non-asphalt surfaces is included to account for grading of entire project.

Construction Phase - Construction phasing is based on the anticipated building schedule for Dana Reserve.

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Dana Reserve Residential - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Trips and VMT - defualts

Demolition - No structures are currently on the project site.

Grading - Defualts

Architectural Coating -

Vehicle Trips - Trip gen for Weekday and sunday is based on traffic report, sat was left default. Trip length was also left as default. Trip type was based on traffic report.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Use low VOC paint (50g/L)

Construction Off-road Equipment Mitigation - Soil stabilizers, Water exposed areas, and use tier 3 engines.

Mobile Land Use Mitigation - 75 units will be "affordable"

Area Mitigation - Use Low VOC Paints

Energy Mitigation - Based on average residential solar systems production and residential usage 75% of electicity generated will be from residential solar. Use energy efficient appliances.

Water Mitigation - Install low flow fixtures and irrigation.

Waste Mitigation -

Fleet Mix - Based on SJVAPCD Residential fleet mix for year 2031.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaCoating	Area_Parking	170407	0
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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	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 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	300.00	108.00
tblConstructionPhase	NumDays	180.00	108.00
tblConstructionPhase	NumDays	465.00	130.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	4,650.00	1,805.00
tblConstructionPhase	NumDays	330.00	1,783.00
tblConstructionPhase	NumDays	330.00	220.00
tblDemolition	PhaseName	Demolition	Grubbing
tblFleetMix	HHD	5.8820e-003	0.02
tblFleetMix	HHD	5.8820e-003	0.02
tblFleetMix	HHD	5.8820e-003	0.02
tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDT1	0.06	0.23
tblFleetMix	LDT1	0.06	0.23
tblFleetMix	LDT1	0.06	0.23
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD2	7.5650e-003	1.0000e-003
tblFleetMix	LHD2	7.5650e-003	1.0000e-003
tblFleetMix	LHD2	7.5650e-003	1.0000e-003
tblFleetMix	MCY	0.03	2.6000e-003
tblFleetMix	MCY	0.03	2.6000e-003
tblFleetMix	MCY	0.03	2.6000e-003
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MH	4.5540e-003	3.1000e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	MH	4.5540e-003	3.1000e-003
tblFleetMix	MH	4.5540e-003	3.1000e-003
tblFleetMix	MHD	8.3110e-003	7.4000e-003
tblFleetMix	MHD	8.3110e-003	7.4000e-003
tblFleetMix	MHD	8.3110e-003	7.4000e-003
tblFleetMix	OBUS	8.7600e-004	0.00
tblFleetMix	OBUS	8.7600e-004	0.00
tblFleetMix	OBUS	8.7600e-004	0.00
tblFleetMix	SBUS	7.6800e-004	1.2000e-003
tblFleetMix	SBUS	7.6800e-004	1.2000e-003
tblFleetMix	SBUS	7.6800e-004	1.2000e-003
tblFleetMix	UBUS	3.4400e-004	4.4000e-003
tblFleetMix	UBUS	3.4400e-004	4.4000e-003
tblFleetMix	UBUS	3.4400e-004	4.4000e-003
tblLandUse	LotAcreage	38.13	23.50
tblLandUse	LotAcreage	270.45	149.50
tblOffRoadEquipment	PhaseName	Demolition	Grubbing
tblOffRoadEquipment	PhaseName	Demolition	Grubbing
tblOffRoadEquipment	PhaseName	Demolition	Grubbing
tblOnRoadDust	PhaseName	Demolition	Grubbing
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.019
tblProjectCharacteristics	CO2IntensityFactor	203.98	118.62
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.002
tblTripsAndVMT	PhaseName	Demolition	Grubbing
tblVehicleTrips	DV_TP	11.00	6.00
tblVehicleTrips	DV_TP	11.00	6.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PR_TP	86.00	90.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	PR_TP	86.00	90.00
tblVehicleTrips	SU_TR	6.28	6.29
tblVehicleTrips	SU_TR	8.55	8.79
tblVehicleTrips	WD_TR	7.32	7.50
tblVehicleTrips	WD_TR	9.44	8.78

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.4919	4.8971	3.9509	8.4400e-003	1.6894	0.2150	1.9044	0.7909	0.1983	0.9892	0.0000	741.7244	741.7244	0.2251	6.5000e-004	747.5470
2024	5.2970	5.7971	10.6470	0.0388	3.2109	0.1190	3.3299	0.8619	0.1124	0.9743	0.0000	3,641.0369	3,641.0369	0.1552	0.2276	3,712.7505
2025	6.0647	5.5491	10.3531	0.0383	3.2802	0.1068	3.3869	0.8803	0.1009	0.9812	0.0000	3,624.1032	3,624.1032	0.1513	0.2215	3,693.8867
2026	6.0192	5.4268	9.9388	0.0374	3.2802	0.1057	3.3859	0.8803	0.0998	0.9801	0.0000	3,555.2145	3,555.2145	0.1473	0.2151	3,623.0013
2027	5.9767	5.3163	9.5824	0.0366	3.2802	0.1045	3.3848	0.8803	0.0988	0.9790	0.0000	3,488.1252	3,488.1252	0.1438	0.2091	3,554.0186
2028	5.9123	5.2018	9.2481	0.0356	3.2677	0.1030	3.3707	0.8769	0.0973	0.9742	0.0000	3,413.2195	3,413.2195	0.1404	0.2028	3,477.1560
2029	5.8946	5.1312	9.0209	0.0350	3.2803	0.1023	3.3826	0.8803	0.0966	0.9770	0.0000	3,367.9694	3,367.9694	0.1383	0.1984	3,430.5403
2030	5.9316	4.8553	9.9344	0.0354	3.0606	0.0804	3.1410	0.8212	0.0791	0.9003	0.0000	3,379.4623	3,379.4623	0.0848	0.1784	3,434.7359
Maximum	**6.0647**	**5.7971**	**10.6470**	**0.0388**	**3.2803**	**0.2150**	**3.3869**	**0.8803**	**0.1983**	**0.9892**	**0.0000**	**3,641.0369**	**3,641.0369**	**0.2251**	**0.2276**	**3,712.7505**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

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					
2023	0.2090	3.9742	5.0408	8.4400e-003	0.6770	0.1823	0.8593	0.3133	0.1823	0.4955	0.0000	741.7235	741.7235	0.2251	6.5000e-004	747.5461
2024	5.1793	5.9146	10.8731	0.0388	3.2109	0.1607	3.3717	0.8619	0.1589	1.0208	0.0000	3,641.0365	3,641.0365	0.1552	0.2276	3,712.7501
2025	5.9597	5.8059	10.5896	0.0383	3.2802	0.1615	3.4417	0.8803	0.1597	1.0400	0.0000	3,624.1028	3,624.1028	0.1513	0.2215	3,693.8863
2026	5.9142	5.6836	10.1754	0.0374	3.2802	0.1604	3.4406	0.8803	0.1587	1.0390	0.0000	3,555.2141	3,555.2141	0.1473	0.2151	3,623.0009
2027	5.8716	5.5731	9.8189	0.0366	3.2802	0.1593	3.4395	0.8803	0.1576	1.0379	0.0000	3,488.1249	3,488.1249	0.1438	0.2091	3,554.0182
2028	5.8077	5.4576	9.4837	0.0356	3.2677	0.1575	3.4252	0.8769	0.1559	1.0329	0.0000	3,413.2191	3,413.2191	0.1404	0.2028	3,477.1556
2029	5.7895	5.3880	9.2574	0.0350	3.2803	0.1570	3.4373	0.8803	0.1555	1.0358	0.0000	3,367.9690	3,367.9690	0.1383	0.1984	3,430.5399
2030	5.7558	6.1317	10.3032	0.0354	3.0606	0.2111	3.2717	0.8212	0.2098	1.0310	0.0000	3,379.4616	3,379.4616	0.0848	0.1784	3,434.7352
Maximum	**5.9597**	**6.1317**	**10.8731**	**0.0388**	**3.2803**	**0.2111**	**3.4417**	**0.8803**	**0.2098**	**1.0400**	**0.0000**	**3,641.0365**	**3,641.0365**	**0.2251**	**0.2276**	**3,712.7501**

	ROG	NOx	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	**2.65**	**-4.16**	**-3.94**	**0.00**	**4.16**	**-44.13**	**2.37**	**6.95**	**-51.53**	**0.29**	**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	**1-2-2023**	**4-1-2023**	1.4154	1.0519
2	**4-2-2023**	**7-1-2023**	1.4839	1.0597
3	**7-2-2023**	**10-1-2023**	1.2331	1.0272

Dana Reserve Residential - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	**10-2-2023**	**1-1-2024**	1.2247	1.0233
5	**1-2-2024**	**4-1-2024**	2.1352	2.1349
6	**4-2-2024**	**7-1-2024**	2.9341	2.9341
7	**7-2-2024**	**10-1-2024**	2.9671	2.9671
8	**10-2-2024**	**1-1-2025**	3.0354	3.0359
9	**1-2-2025**	**4-1-2025**	2.8858	2.9231
10	**4-2-2025**	**7-1-2025**	2.8521	2.8899
11	**7-2-2025**	**10-1-2025**	2.8842	2.9224
12	**10-2-2025**	**1-1-2026**	2.9502	2.9884
13	**1-2-2026**	**4-1-2026**	2.8438	2.8812
14	**4-2-2026**	**7-1-2026**	2.8121	2.8499
15	**7-2-2026**	**10-1-2026**	2.8437	2.8819
16	**10-2-2026**	**1-1-2027**	2.9073	2.9455
17	**1-2-2027**	**4-1-2027**	2.8055	2.8429
18	**4-2-2027**	**7-1-2027**	2.7755	2.8133
19	**7-2-2027**	**10-1-2027**	2.8067	2.8449
20	**10-2-2027**	**1-1-2028**	2.8682	2.9064
21	**1-2-2028**	**4-1-2028**	2.8021	2.8399
22	**4-2-2028**	**7-1-2028**	2.7430	2.7808
23	**7-2-2028**	**10-1-2028**	2.7738	2.8120
24	**10-2-2028**	**1-1-2029**	2.8332	2.8714
25	**1-2-2029**	**4-1-2029**	2.7383	2.7757
26	**4-2-2029**	**7-1-2029**	2.7116	2.7494
27	**7-2-2029**	**10-1-2029**	2.7420	2.7802
28	**10-2-2029**	**1-1-2030**	2.7978	2.8377
29	**1-2-2030**	**4-1-2030**	2.7354	3.0028
30	**4-2-2030**	**7-1-2030**	2.8029	3.1096
31	**7-2-2030**	**9-30-2030**	2.8029	3.1096
		Highest	3.0354	3.1096

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	9.6397	0.2259	19.5922	1.0400e-003		0.1089	0.1089		0.1089	0.1089	0.0000	32.0885	32.0885	0.0306	0.0000	32.8529
Energy	0.1521	1.2995	0.5530	8.2900e-003		0.1051	0.1051		0.1051	0.1051	0.0000	1,989.3225	1,989.3225	0.1064	0.0358	2,002.6390
Mobile	2.1896	4.9994	26.8997	0.0900	11.6712	0.0621	11.7333	3.1137	0.0580	3.1717	0.0000	8,857.8337	8,857.8337	0.2635	0.3961	8,982.4631
Waste						0.0000	0.0000		0.0000	0.0000	255.2043	0.0000	255.2043	15.0821	0.0000	632.2579
Water						0.0000	0.0000		0.0000	0.0000	29.8273	38.5341	68.3614	3.0697	0.0730	166.8546
Total	**11.9814**	**6.5248**	**47.0449**	**0.0993**	**11.6712**	**0.2761**	**11.9473**	**3.1137**	**0.2720**	**3.3857**	**285.0316**	**10,917.7788**	**11,202.8104**	**18.5524**	**0.5049**	**11,817.0674**

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	9.6397	0.2259	19.5922	1.0400e-003		0.1089	0.1089		0.1089	0.1089	0.0000	32.0885	32.0885	0.0306	0.0000	32.8529
Energy	0.1521	1.2995	0.5530	8.2900e-003		0.1051	0.1051		0.1051	0.1051	0.0000	1,623.2664	1,623.2664	0.0478	0.0296	1,633.2778
Mobile	2.1292	4.4511	24.2243	0.0764	9.8473	0.0534	9.9007	2.6271	0.0499	2.6770	0.0000	7,519.9672	7,519.9672	0.2469	0.3504	7,630.5666
Waste						0.0000	0.0000		0.0000	0.0000	127.6022	0.0000	127.6022	7.5411	0.0000	316.1289
Water						0.0000	0.0000		0.0000	0.0000	23.8619	32.3788	56.2406	2.4560	0.0584	135.0492
Total	**11.9210**	**5.9764**	**44.3694**	**0.0857**	**9.8473**	**0.2674**	**10.1147**	**2.6271**	**0.2639**	**2.8910**	**151.4640**	**9,207.7008**	**9,359.1649**	**10.3224**	**0.4384**	**9,747.8754**

	ROG	NOx	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	**0.50**	**8.40**	**5.69**	**13.68**	**15.63**	**3.14**	**15.34**	**15.63**	**2.99**	**14.61**	**46.86**	**15.66**	**16.46**	**44.36**	**13.16**	**17.51**

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	1/2/2023	5/31/2023	5	108	
2	Site Preparation	Site Preparation	2/1/2023	6/30/2023	5	108	
3	Grading	Grading	7/3/2023	12/29/2023	5	130	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	1/1/2024	11/29/2030	5	1805	
5	Architectural Coating	Architectural Coating	3/1/2024	12/31/2030	5	1783	
6	Paving	Paving	2/1/2030	12/5/2030	5	220	

Acres of Grading (Site Preparation Phase): 162

Acres of Grading (Grading Phase): 390

Acres of Paving: 55.2

Residential Indoor: 4,271,535; Residential Outdoor: 1,423,845; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 170,407 (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	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,932.00	620.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	386.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

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 - 2023

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	0.1225	1.1602	1.0607	2.1000e-003		0.0539	0.0539		0.0501	0.0501	0.0000	183.5572	183.5572	0.0514	0.0000	184.8423
Total	**0.1225**	**1.1602**	**1.0607**	**2.1000e-003**		**0.0539**	**0.0539**		**0.0501**	**0.0501**	**0.0000**	**183.5572**	**183.5572**	**0.0514**	**0.0000**	**184.8423**

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	2.5800e-003	1.8800e-003	0.0214	7.0000e-005	7.8000e-003	4.0000e-005	7.8400e-003	2.0700e-003	4.0000e-005	2.1100e-003	0.0000	6.0591	6.0591	1.7000e-004	1.7000e-004	6.1145
Total	**2.5800e-003**	**1.8800e-003**	**0.0214**	**7.0000e-005**	**7.8000e-003**	**4.0000e-005**	**7.8400e-003**	**2.0700e-003**	**4.0000e-005**	**2.1100e-003**	**0.0000**	**6.0591**	**6.0591**	**1.7000e-004**	**1.7000e-004**	**6.1145**

Dana Reserve Residential - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grubbing - 2023

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	0.0499	0.9889	1.3324	2.1000e-003		0.0466	0.0466		0.0466	0.0466	0.0000	183.5569	183.5569	0.0514	0.0000	184.8421
Total	**0.0499**	**0.9889**	**1.3324**	**2.1000e-003**		**0.0466**	**0.0466**		**0.0466**	**0.0466**	**0.0000**	**183.5569**	**183.5569**	**0.0514**	**0.0000**	**184.8421**

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	2.5800e-003	1.8800e-003	0.0214	7.0000e-005	7.8000e-003	4.0000e-005	7.8400e-003	2.0700e-003	4.0000e-005	2.1100e-003	0.0000	6.0591	6.0591	1.7000e-004	1.7000e-004	6.1145
Total	**2.5800e-003**	**1.8800e-003**	**0.0214**	**7.0000e-005**	**7.8000e-003**	**4.0000e-005**	**7.8400e-003**	**2.0700e-003**	**4.0000e-005**	**2.1100e-003**	**0.0000**	**6.0591**	**6.0591**	**1.7000e-004**	**1.7000e-004**	**6.1145**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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					1.0615	0.0000	1.0615	0.5455	0.0000	0.5455	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1436	1.4863	0.9852	2.0600e-003		0.0684	0.0684		0.0629	0.0629	0.0000	180.6338	180.6338	0.0584	0.0000	182.0943
Total	**0.1436**	**1.4863**	**0.9852**	**2.0600e-003**	**1.0615**	**0.0684**	**1.1299**	**0.5455**	**0.0629**	**0.6084**	**0.0000**	**180.6338**	**180.6338**	**0.0584**	**0.0000**	**182.0943**

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-003	2.2600e-003	0.0257	8.0000e-005	9.3600e-003	5.0000e-005	9.4000e-003	2.4900e-003	4.0000e-005	2.5300e-003	0.0000	7.2710	7.2710	2.0000e-004	2.1000e-004	7.3374
Total	**3.1000e-003**	**2.2600e-003**	**0.0257**	**8.0000e-005**	**9.3600e-003**	**5.0000e-005**	**9.4000e-003**	**2.4900e-003**	**4.0000e-005**	**2.5300e-003**	**0.0000**	**7.2710**	**7.2710**	**2.0000e-004**	**2.1000e-004**	**7.3374**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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					0.4140	0.0000	0.4140	0.2128	0.0000	0.2128	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0503	1.0295	1.2398	2.0600e-003		0.0511	0.0511		0.0511	0.0511	0.0000	180.6336	180.6336	0.0584	0.0000	182.0941
Total	**0.0503**	**1.0295**	**1.2398**	**2.0600e-003**	**0.4140**	**0.0511**	**0.4651**	**0.2128**	**0.0511**	**0.2639**	**0.0000**	**180.6336**	**180.6336**	**0.0584**	**0.0000**	**182.0941**

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-003	2.2600e-003	0.0257	8.0000e-005	9.3600e-003	5.0000e-005	9.4000e-003	2.4900e-003	4.0000e-005	2.5300e-003	0.0000	7.2710	7.2710	2.0000e-004	2.1000e-004	7.3374
Total	**3.1000e-003**	**2.2600e-003**	**0.0257**	**8.0000e-005**	**9.3600e-003**	**5.0000e-005**	**9.4000e-003**	**2.4900e-003**	**4.0000e-005**	**2.5300e-003**	**0.0000**	**7.2710**	**7.2710**	**2.0000e-004**	**2.1000e-004**	**7.3374**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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					0.5982	0.0000	0.5982	0.2375	0.0000	0.2375	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2159	2.2435	1.8233	4.0400e-003		0.0926	0.0926		0.0852	0.0852	0.0000	354.4789	354.4789	0.1147	0.0000	357.3450
Total	**0.2159**	**2.2435**	**1.8233**	**4.0400e-003**	**0.5982**	**0.0926**	**0.6908**	**0.2375**	**0.0852**	**0.3227**	**0.0000**	**354.4789**	**354.4789**	**0.1147**	**0.0000**	**357.3450**

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	4.1400e-003	3.0200e-003	0.0344	1.0000e-004	0.0125	6.0000e-005	0.0126	3.3300e-003	6.0000e-005	3.3800e-003	0.0000	9.7245	9.7245	2.7000e-004	2.8000e-004	9.8134
Total	**4.1400e-003**	**3.0200e-003**	**0.0344**	**1.0000e-004**	**0.0125**	**6.0000e-005**	**0.0126**	**3.3300e-003**	**6.0000e-005**	**3.3800e-003**	**0.0000**	**9.7245**	**9.7245**	**2.7000e-004**	**2.8000e-004**	**9.8134**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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					0.2333	0.0000	0.2333	0.0926	0.0000	0.0926	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0990	1.9486	2.3870	4.0400e-003		0.0845	0.0845		0.0845	0.0845	0.0000	354.4784	354.4784	0.1147	0.0000	357.3446
Total	**0.0990**	**1.9486**	**2.3870**	**4.0400e-003**	**0.2333**	**0.0845**	**0.3178**	**0.0926**	**0.0845**	**0.1771**	**0.0000**	**354.4784**	**354.4784**	**0.1147**	**0.0000**	**357.3446**

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	4.1400e-003	3.0200e-003	0.0344	1.0000e-004	0.0125	6.0000e-005	0.0126	3.3300e-003	6.0000e-005	3.3800e-003	0.0000	9.7245	9.7245	2.7000e-004	2.8000e-004	9.8134
Total	**4.1400e-003**	**3.0200e-003**	**0.0344**	**1.0000e-004**	**0.0125**	**6.0000e-005**	**0.0126**	**3.3300e-003**	**6.0000e-005**	**3.3800e-003**	**0.0000**	**9.7245**	**9.7245**	**2.7000e-004**	**2.8000e-004**	**9.8134**

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	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179
Total	**0.1928**	**1.7611**	**2.1179**	**3.5300e-003**		**0.0803**	**0.0803**		**0.0756**	**0.0756**	**0.0000**	**303.7223**	**303.7223**	**0.0718**	**0.0000**	**305.5179**

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	0.0919	3.2926	1.0562	0.0119	0.3693	0.0187	0.3880	0.1067	0.0179	0.1246	0.0000	1,153.7636	1,153.7636	0.0263	0.1694	1,204.9115
Worker	0.7595	0.5235	6.2386	0.0198	2.4366	0.0114	2.4480	0.6475	0.0105	0.6580	0.0000	1,848.4365	1,848.4365	0.0475	0.0499	1,864.4975
Total	**0.8514**	**3.8161**	**7.2948**	**0.0316**	**2.8059**	**0.0301**	**2.8360**	**0.7543**	**0.0284**	**0.7827**	**0.0000**	**3,002.2001**	**3,002.2001**	**0.0739**	**0.2193**	**3,069.4090**

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	0.0883	1.8636	2.3415	3.5300e-003		0.1184	0.1184		0.1184	0.1184	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175
Total	**0.0883**	**1.8636**	**2.3415**	**3.5300e-003**		**0.1184**	**0.1184**		**0.1184**	**0.1184**	**0.0000**	**303.7220**	**303.7220**	**0.0718**	**0.0000**	**305.5175**

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	0.0919	3.2926	1.0562	0.0119	0.3693	0.0187	0.3880	0.1067	0.0179	0.1246	0.0000	1,153.7636	1,153.7636	0.0263	0.1694	1,204.9115
Worker	0.7595	0.5235	6.2386	0.0198	2.4366	0.0114	2.4480	0.6475	0.0105	0.6580	0.0000	1,848.4365	1,848.4365	0.0475	0.0499	1,864.4975
Total	**0.8514**	**3.8161**	**7.2948**	**0.0316**	**2.8059**	**0.0301**	**2.8360**	**0.7543**	**0.0284**	**0.7827**	**0.0000**	**3,002.2001**	**3,002.2001**	**0.0739**	**0.2193**	**3,069.4090**

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	0.0886	3.2104	1.0362	0.0116	0.3680	0.0182	0.3862	0.1063	0.0174	0.1238	0.0000	1,129.4572	1,129.4572	0.0267	0.1657	1,179.5104
Worker	0.7155	0.4684	5.8191	0.0190	2.4273	0.0109	2.4381	0.6451	0.0100	0.6550	0.0000	1,799.2030	1,799.2030	0.0431	0.0465	1,814.1275
Total	**0.8041**	**3.6788**	**6.8553**	**0.0306**	**2.7952**	**0.0291**	**2.8243**	**0.7514**	**0.0274**	**0.7788**	**0.0000**	**2,928.6602**	**2,928.6602**	**0.0698**	**0.2122**	**2,993.6378**

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	0.0879	1.8565	2.3325	3.5200e-003		0.1179	0.1179		0.1179	0.1179	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.0879**	**1.8565**	**2.3325**	**3.5200e-003**		**0.1179**	**0.1179**		**0.1179**	**0.1179**	**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	0.0886	3.2104	1.0362	0.0116	0.3680	0.0182	0.3862	0.1063	0.0174	0.1238	0.0000	1,129.4572	1,129.4572	0.0267	0.1657	1,179.5104
Worker	0.7155	0.4684	5.8191	0.0190	2.4273	0.0109	2.4381	0.6451	0.0100	0.6550	0.0000	1,799.2030	1,799.2030	0.0431	0.0465	1,814.1275
Total	**0.8041**	**3.6788**	**6.8553**	**0.0306**	**2.7952**	**0.0291**	**2.8243**	**0.7514**	**0.0274**	**0.7788**	**0.0000**	**2,928.6602**	**2,928.6602**	**0.0698**	**0.2122**	**2,993.6378**

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	0.1785	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	0.0859	3.1408	1.0240	0.0114	0.3680	0.0177	0.3857	0.1064	0.0169	0.1233	0.0000	1,109.2139	1,109.2139	0.0270	0.1626	1,158.3539
Worker	0.6797	0.4244	5.4841	0.0185	2.4273	0.0103	2.4376	0.6451	9.5200e-003	0.6546	0.0000	1,758.6582	1,758.6582	0.0395	0.0437	1,772.6796
Total	**0.7657**	**3.5652**	**6.5080**	**0.0298**	**2.7953**	**0.0280**	**2.8233**	**0.7514**	**0.0265**	**0.7779**	**0.0000**	**2,867.8721**	**2,867.8721**	**0.0665**	**0.2064**	**2,931.0334**

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	0.0879	1.8565	2.3325	3.5200e-003		0.1179	0.1179		0.1179	0.1179	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.0879**	**1.8565**	**2.3325**	**3.5200e-003**		**0.1179**	**0.1179**		**0.1179**	**0.1179**	**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	0.0859	3.1408	1.0240	0.0114	0.3680	0.0177	0.3857	0.1064	0.0169	0.1233	0.0000	1,109.2139	1,109.2139	0.0270	0.1626	1,158.3539
Worker	0.6797	0.4244	5.4841	0.0185	2.4273	0.0103	2.4376	0.6451	9.5200e-003	0.6546	0.0000	1,758.6582	1,758.6582	0.0395	0.0437	1,772.6796
Total	**0.7657**	**3.5652**	**6.5080**	**0.0298**	**2.7953**	**0.0280**	**2.8233**	**0.7514**	**0.0265**	**0.7779**	**0.0000**	**2,867.8721**	**2,867.8721**	**0.0665**	**0.2064**	**2,931.0334**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2027

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	0.0836	3.0750	1.0141	0.0112	0.3680	0.0173	0.3853	0.1064	0.0165	0.1229	0.0000	1,087.3725	1,087.3725	0.0274	0.1593	1,135.5413
Worker	0.6462	0.3871	5.1952	0.0179	2.4273	9.7400e-003	2.4370	0.6451	8.9700e-003	0.6540	0.0000	1,720.9452	1,720.9452	0.0362	0.0414	1,734.1978
Total	**0.7298**	**3.4622**	**6.2093**	**0.0291**	**2.7953**	**0.0270**	**2.8223**	**0.7514**	**0.0255**	**0.7769**	**0.0000**	**2,808.3177**	**2,808.3177**	**0.0636**	**0.2008**	**2,869.7391**

Dana Reserve Residential - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2027

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	0.0879	1.8565	2.3325	3.5200e-003		0.1179	0.1179		0.1179	0.1179	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.0879**	**1.8565**	**2.3325**	**3.5200e-003**		**0.1179**	**0.1179**		**0.1179**	**0.1179**	**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	0.0836	3.0750	1.0141	0.0112	0.3680	0.0173	0.3853	0.1064	0.0165	0.1229	0.0000	1,087.3725	1,087.3725	0.0274	0.1593	1,135.5413
Worker	0.6462	0.3871	5.1952	0.0179	2.4273	9.7400e-003	2.4370	0.6451	8.9700e-003	0.6540	0.0000	1,720.9452	1,720.9452	0.0362	0.0414	1,734.1978
Total	**0.7298**	**3.4622**	**6.2093**	**0.0291**	**2.7953**	**0.0270**	**2.8223**	**0.7514**	**0.0255**	**0.7769**	**0.0000**	**2,808.3177**	**2,808.3177**	**0.0636**	**0.2008**	**2,869.7391**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2028

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	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671
Total	**0.1778**	**1.6211**	**2.0910**	**3.5000e-003**		**0.0686**	**0.0686**		**0.0645**	**0.0645**	**0.0000**	**301.4953**	**301.4953**	**0.0709**	**0.0000**	**303.2671**

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	0.0812	3.0067	1.0029	0.0109	0.3667	0.0168	0.3834	0.1060	0.0160	0.1220	0.0000	1,062.4357	1,062.4357	0.0277	0.1556	1,109.4942
Worker	0.6110	0.3544	4.9333	0.0174	2.4180	9.1100e-003	2.4271	0.6426	8.3900e-003	0.6510	0.0000	1,680.3701	1,680.3701	0.0333	0.0393	1,692.9230
Total	**0.6922**	**3.3610**	**5.9362**	**0.0283**	**2.7846**	**0.0259**	**2.8105**	**0.7486**	**0.0244**	**0.7730**	**0.0000**	**2,742.8058**	**2,742.8058**	**0.0610**	**0.1949**	**2,802.4172**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2028

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	0.0876	1.8494	2.3236	3.5000e-003		0.1175	0.1175		0.1175	0.1175	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667
Total	**0.0876**	**1.8494**	**2.3236**	**3.5000e-003**		**0.1175**	**0.1175**		**0.1175**	**0.1175**	**0.0000**	**301.4949**	**301.4949**	**0.0709**	**0.0000**	**303.2667**

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	0.0812	3.0067	1.0029	0.0109	0.3667	0.0168	0.3834	0.1060	0.0160	0.1220	0.0000	1,062.4357	1,062.4357	0.0277	0.1556	1,109.4942
Worker	0.6110	0.3544	4.9333	0.0174	2.4180	9.1100e-003	2.4271	0.6426	8.3900e-003	0.6510	0.0000	1,680.3701	1,680.3701	0.0333	0.0393	1,692.9230
Total	**0.6922**	**3.3610**	**5.9362**	**0.0283**	**2.7846**	**0.0259**	**2.8105**	**0.7486**	**0.0244**	**0.7730**	**0.0000**	**2,742.8058**	**2,742.8058**	**0.0610**	**0.1949**	**2,802.4172**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2029

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	0.0794	2.9598	1.0001	0.0107	0.3681	0.0164	0.3845	0.1064	0.0157	0.1221	0.0000	1,045.3580	1,045.3580	0.0282	0.1530	1,091.6554
Worker	0.5813	0.3289	4.7389	0.0170	2.4273	8.5700e-003	2.4358	0.6451	7.8900e-003	0.6529	0.0000	1,655.8161	1,655.8161	0.0310	0.0378	1,667.8594
Total	**0.6607**	**3.2887**	**5.7389**	**0.0277**	**2.7954**	**0.0250**	**2.8203**	**0.7515**	**0.0236**	**0.7750**	**0.0000**	**2,701.1741**	**2,701.1741**	**0.0592**	**0.1908**	**2,759.5148**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2029

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	0.0879	1.8565	2.3325	3.5200e-003		0.1179	0.1179		0.1179	0.1179	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.0879**	**1.8565**	**2.3325**	**3.5200e-003**		**0.1179**	**0.1179**		**0.1179**	**0.1179**	**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	0.0794	2.9598	1.0001	0.0107	0.3681	0.0164	0.3845	0.1064	0.0157	0.1221	0.0000	1,045.3580	1,045.3580	0.0282	0.1530	1,091.6554
Worker	0.5813	0.3289	4.7389	0.0170	2.4273	8.5700e-003	2.4358	0.6451	7.8900e-003	0.6529	0.0000	1,655.8161	1,655.8161	0.0310	0.0378	1,667.8594
Total	**0.6607**	**3.2887**	**5.7389**	**0.0277**	**2.7954**	**0.0250**	**2.8203**	**0.7515**	**0.0236**	**0.7750**	**0.0000**	**2,701.1741**	**2,701.1741**	**0.0592**	**0.1908**	**2,759.5148**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2030

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	0.1564	0.9482	1.9308	3.7000e-003		0.0177	0.0177		0.0177	0.0177	0.0000	314.1189	314.1189	0.0126	0.0000	314.4340
Total	**0.1564**	**0.9482**	**1.9308**	**3.7000e-003**		**0.0177**	**0.0177**		**0.0177**	**0.0177**	**0.0000**	**314.1189**	**314.1189**	**0.0126**	**0.0000**	**314.4340**

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	0.0712	2.6689	0.9123	9.6200e-003	0.3371	0.0147	0.3518	0.0974	0.0141	0.1115	0.0000	940.0739	940.0739	0.0261	0.1375	981.7110
Worker	0.5040	0.2801	4.1730	0.0152	2.2227	7.3500e-003	2.2300	0.5907	6.7700e-003	0.5974	0.0000	1,490.9076	1,490.9076	0.0263	0.0333	1,501.4983
Total	**0.5752**	**2.9490**	**5.0853**	**0.0248**	**2.5598**	**0.0221**	**2.5818**	**0.6881**	**0.0208**	**0.7089**	**0.0000**	**2,430.9815**	**2,430.9815**	**0.0525**	**0.1709**	**2,483.2093**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2030

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	0.0805	1.7000	2.1359	3.7000e-003		0.1080	0.1080		0.1080	0.1080	0.0000	314.1185	314.1185	0.0126	0.0000	314.4336
Total	**0.0805**	**1.7000**	**2.1359**	**3.7000e-003**		**0.1080**	**0.1080**		**0.1080**	**0.1080**	**0.0000**	**314.1185**	**314.1185**	**0.0126**	**0.0000**	**314.4336**

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	0.0712	2.6689	0.9123	9.6200e-003	0.3371	0.0147	0.3518	0.0974	0.0141	0.1115	0.0000	940.0739	940.0739	0.0261	0.1375	981.7110
Worker	0.5040	0.2801	4.1730	0.0152	2.2227	7.3500e-003	2.2300	0.5907	6.7700e-003	0.5974	0.0000	1,490.9076	1,490.9076	0.0263	0.0333	1,501.4983
Total	**0.5752**	**2.9490**	**5.0853**	**0.0248**	**2.5598**	**0.0221**	**2.5818**	**0.6881**	**0.0208**	**0.7089**	**0.0000**	**2,430.9815**	**2,430.9815**	**0.0525**	**0.1709**	**2,483.2093**

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	4.1069					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0197	0.1329	0.1973	3.2000e-004		6.6400e-003	6.6400e-003		6.6400e-003	6.6400e-003	0.0000	27.8305	27.8305	1.5700e-003	0.0000	27.8696
Total	**4.1266**	**0.1329**	**0.1973**	**3.2000e-004**		**6.6400e-003**	**6.6400e-003**		**6.6400e-003**	**6.6400e-003**	**0.0000**	**27.8305**	**27.8305**	**1.5700e-003**	**0.0000**	**27.8696**

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	0.1263	0.0870	1.0371	3.2800e-003	0.4051	1.9000e-003	0.4070	0.1076	1.7500e-003	0.1094	0.0000	307.2840	307.2840	7.9000e-003	8.3000e-003	309.9540
Total	**0.1263**	**0.0870**	**1.0371**	**3.2800e-003**	**0.4051**	**1.9000e-003**	**0.4070**	**0.1076**	**1.7500e-003**	**0.1094**	**0.0000**	**307.2840**	**307.2840**	**7.9000e-003**	**8.3000e-003**	**309.9540**

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	4.1069					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4800e-003	0.1479	0.1997	3.2000e-004		0.0104	0.0104		0.0104	0.0104	0.0000	27.8304	27.8304	1.5700e-003	0.0000	27.8696
Total	**4.1134**	**0.1479**	**0.1997**	**3.2000e-004**		**0.0104**	**0.0104**		**0.0104**	**0.0104**	**0.0000**	**27.8304**	**27.8304**	**1.5700e-003**	**0.0000**	**27.8696**

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	0.1263	0.0870	1.0371	3.2800e-003	0.4051	1.9000e-003	0.4070	0.1076	1.7500e-003	0.1094	0.0000	307.2840	307.2840	7.9000e-003	8.3000e-003	309.9540
Total	**0.1263**	**0.0870**	**1.0371**	**3.2800e-003**	**0.4051**	**1.9000e-003**	**0.4070**	**0.1076**	**1.7500e-003**	**0.1094**	**0.0000**	**307.2840**	**307.2840**	**7.9000e-003**	**8.3000e-003**	**309.9540**

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	4.9170					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	**4.9393**	**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	0.1429	0.0936	1.1626	3.8000e-003	0.4850	2.1700e-003	0.4871	0.1289	2.0000e-003	0.1309	0.0000	359.4681	359.4681	8.6100e-003	9.2800e-003	362.4499
Total	**0.1429**	**0.0936**	**1.1626**	**3.8000e-003**	**0.4850**	**2.1700e-003**	**0.4871**	**0.1289**	**2.0000e-003**	**0.1309**	**0.0000**	**359.4681**	**359.4681**	**8.6100e-003**	**9.2800e-003**	**362.4499**

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	4.9170					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**4.9248**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**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	0.1429	0.0936	1.1626	3.8000e-003	0.4850	2.1700e-003	0.4871	0.1289	2.0000e-003	0.1309	0.0000	359.4681	359.4681	8.6100e-003	9.2800e-003	362.4499
Total	**0.1429**	**0.0936**	**1.1626**	**3.8000e-003**	**0.4850**	**2.1700e-003**	**0.4871**	**0.1289**	**2.0000e-003**	**0.1309**	**0.0000**	**359.4681**	**359.4681**	**8.6100e-003**	**9.2800e-003**	**362.4499**

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	4.9170					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	**4.9393**	**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	0.1358	0.0848	1.0957	3.6900e-003	0.4850	2.0600e-003	0.4870	0.1289	1.9000e-003	0.1308	0.0000	351.3675	351.3675	7.8800e-003	8.7400e-003	354.1689
Total	**0.1358**	**0.0848**	**1.0957**	**3.6900e-003**	**0.4850**	**2.0600e-003**	**0.4870**	**0.1289**	**1.9000e-003**	**0.1308**	**0.0000**	**351.3675**	**351.3675**	**7.8800e-003**	**8.7400e-003**	**354.1689**

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	4.9170					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**4.9248**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**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	0.1358	0.0848	1.0957	3.6900e-003	0.4850	2.0600e-003	0.4870	0.1289	1.9000e-003	0.1308	0.0000	351.3675	351.3675	7.8800e-003	8.7400e-003	354.1689
Total	**0.1358**	**0.0848**	**1.0957**	**3.6900e-003**	**0.4850**	**2.0600e-003**	**0.4870**	**0.1289**	**1.9000e-003**	**0.1308**	**0.0000**	**351.3675**	**351.3675**	**7.8800e-003**	**8.7400e-003**	**354.1689**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2027

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	4.9170					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	**4.9393**	**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	0.1291	0.0773	1.0380	3.5800e-003	0.4850	1.9500e-003	0.4869	0.1289	1.7900e-003	0.1307	0.0000	343.8327	343.8327	7.2400e-003	8.2800e-003	346.4805
Total	**0.1291**	**0.0773**	**1.0380**	**3.5800e-003**	**0.4850**	**1.9500e-003**	**0.4869**	**0.1289**	**1.7900e-003**	**0.1307**	**0.0000**	**343.8327**	**343.8327**	**7.2400e-003**	**8.2800e-003**	**346.4805**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2027

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	4.9170					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**4.9248**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**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	0.1291	0.0773	1.0380	3.5800e-003	0.4850	1.9500e-003	0.4869	0.1289	1.7900e-003	0.1307	0.0000	343.8327	343.8327	7.2400e-003	8.2800e-003	346.4805
Total	**0.1291**	**0.0773**	**1.0380**	**3.5800e-003**	**0.4850**	**1.9500e-003**	**0.4869**	**0.1289**	**1.7900e-003**	**0.1307**	**0.0000**	**343.8327**	**343.8327**	**7.2400e-003**	**8.2800e-003**	**346.4805**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

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	4.8982					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0222	0.1489	0.2352	3.9000e-004		6.7000e-003	6.7000e-003		6.7000e-003	6.7000e-003	0.0000	33.1923	33.1923	1.8100e-003	0.0000	33.2376
Total	**4.9204**	**0.1489**	**0.2352**	**3.9000e-004**		**6.7000e-003**	**6.7000e-003**		**6.7000e-003**	**6.7000e-003**	**0.0000**	**33.1923**	**33.1923**	**1.8100e-003**	**0.0000**	**33.2376**

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	0.1221	0.0708	0.9856	3.4700e-003	0.4831	1.8200e-003	0.4849	0.1284	1.6800e-003	0.1301	0.0000	335.7261	335.7261	6.6600e-003	7.8600e-003	338.2341
Total	**0.1221**	**0.0708**	**0.9856**	**3.4700e-003**	**0.4831**	**1.8200e-003**	**0.4849**	**0.1284**	**1.6800e-003**	**0.1301**	**0.0000**	**335.7261**	**335.7261**	**6.6600e-003**	**7.8600e-003**	**338.2341**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

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	4.8982					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7300e-003	0.1764	0.2382	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.1923	33.1923	1.8100e-003	0.0000	33.2375
Total	**4.9059**	**0.1764**	**0.2382**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.1923**	**33.1923**	**1.8100e-003**	**0.0000**	**33.2375**

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	0.1221	0.0708	0.9856	3.4700e-003	0.4831	1.8200e-003	0.4849	0.1284	1.6800e-003	0.1301	0.0000	335.7261	335.7261	6.6600e-003	7.8600e-003	338.2341
Total	**0.1221**	**0.0708**	**0.9856**	**3.4700e-003**	**0.4831**	**1.8200e-003**	**0.4849**	**0.1284**	**1.6800e-003**	**0.1301**	**0.0000**	**335.7261**	**335.7261**	**6.6600e-003**	**7.8600e-003**	**338.2341**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

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	4.9170					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	**4.9393**	**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	0.1161	0.0657	0.9468	3.4000e-003	0.4850	1.7100e-003	0.4867	0.1289	1.5800e-003	0.1305	0.0000	330.8204	330.8204	6.1900e-003	7.5600e-003	333.2266
Total	**0.1161**	**0.0657**	**0.9468**	**3.4000e-003**	**0.4850**	**1.7100e-003**	**0.4867**	**0.1289**	**1.5800e-003**	**0.1305**	**0.0000**	**330.8204**	**330.8204**	**6.1900e-003**	**7.5600e-003**	**333.2266**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

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	4.9170					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**4.9248**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**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	0.1161	0.0657	0.9468	3.4000e-003	0.4850	1.7100e-003	0.4867	0.1289	1.5800e-003	0.1305	0.0000	330.8204	330.8204	6.1900e-003	7.5600e-003	333.2266
Total	**0.1161**	**0.0657**	**0.9468**	**3.4000e-003**	**0.4850**	**1.7100e-003**	**0.4867**	**0.1289**	**1.5800e-003**	**0.1305**	**0.0000**	**330.8204**	**330.8204**	**6.1900e-003**	**7.5600e-003**	**333.2266**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2030

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	4.9170					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1117	0.2346	3.9000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	33.3200	33.3200	1.3500e-003	0.0000	33.3537
Total	**4.9341**	**0.1117**	**0.2346**	**3.9000e-004**		**2.6500e-003**	**2.6500e-003**		**2.6500e-003**	**2.6500e-003**	**0.0000**	**33.3200**	**33.3200**	**1.3500e-003**	**0.0000**	**33.3537**

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	0.1100	0.0611	0.9105	3.3200e-003	0.4850	1.6000e-003	0.4866	0.1289	1.4800e-003	0.1304	0.0000	325.2921	325.2921	5.7500e-003	7.2700e-003	327.6028
Total	**0.1100**	**0.0611**	**0.9105**	**3.3200e-003**	**0.4850**	**1.6000e-003**	**0.4866**	**0.1289**	**1.4800e-003**	**0.1304**	**0.0000**	**325.2921**	**325.2921**	**5.7500e-003**	**7.2700e-003**	**327.6028**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2030

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	4.9170					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.3199	33.3199	1.3500e-003	0.0000	33.3536
Total	**4.9248**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.3199**	**33.3199**	**1.3500e-003**	**0.0000**	**33.3536**

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	0.1100	0.0611	0.9105	3.3200e-003	0.4850	1.6000e-003	0.4866	0.1289	1.4800e-003	0.1304	0.0000	325.2921	325.2921	5.7500e-003	7.2700e-003	327.6028
Total	**0.1100**	**0.0611**	**0.9105**	**3.3200e-003**	**0.4850**	**1.6000e-003**	**0.4866**	**0.1289**	**1.4800e-003**	**0.1304**	**0.0000**	**325.2921**	**325.2921**	**5.7500e-003**	**7.2700e-003**	**327.6028**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2030

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	0.1523	0.7832	1.7435	3.0900e-003		0.0364	0.0364		0.0364	0.0364	0.0000	265.0947	265.0947	0.0124	0.0000	265.4054
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1523**	**0.7832**	**1.7435**	**3.0900e-003**		**0.0364**	**0.0364**		**0.0364**	**0.0364**	**0.0000**	**265.0947**	**265.0947**	**0.0124**	**0.0000**	**265.4054**

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-003	2.0000e-003	0.0298	1.1000e-004	0.0159	5.0000e-005	0.0159	4.2200e-003	5.0000e-005	4.2700e-003	0.0000	10.6552	10.6552	1.9000e-004	2.4000e-004	10.7308
Total	**3.6000e-003**	**2.0000e-003**	**0.0298**	**1.1000e-004**	**0.0159**	**5.0000e-005**	**0.0159**	**4.2200e-003**	**5.0000e-005**	**4.2700e-003**	**0.0000**	**10.6552**	**10.6552**	**1.9000e-004**	**2.4000e-004**	**10.7308**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2030

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	0.0617	1.2425	1.9025	3.0900e-003		0.0670	0.0670		0.0670	0.0670	0.0000	265.0944	265.0944	0.0124	0.0000	265.4050
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0617**	**1.2425**	**1.9025**	**3.0900e-003**		**0.0670**	**0.0670**		**0.0670**	**0.0670**	**0.0000**	**265.0944**	**265.0944**	**0.0124**	**0.0000**	**265.4050**

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-003	2.0000e-003	0.0298	1.1000e-004	0.0159	5.0000e-005	0.0159	4.2200e-003	5.0000e-005	4.2700e-003	0.0000	10.6552	10.6552	1.9000e-004	2.4000e-004	10.7308
Total	**3.6000e-003**	**2.0000e-003**	**0.0298**	**1.1000e-004**	**0.0159**	**5.0000e-005**	**0.0159**	**4.2200e-003**	**5.0000e-005**	**4.2700e-003**	**0.0000**	**10.6552**	**10.6552**	**1.9000e-004**	**2.4000e-004**	**10.7308**

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 Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Integrate Below Market Rate Housing

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	2.1292	4.4511	24.2243	0.0764	9.8473	0.0534	9.9007	2.6271	0.0499	2.6770	0.0000	7,519.9672	7,519.9672	0.2469	0.3504	7,630.5666
Unmitigated	2.1896	4.9994	26.8997	0.0900	11.6712	0.0621	11.7333	3.1137	0.0580	3.1717	0.0000	8,857.8337	8,857.8337	0.2635	0.3961	8,982.4631

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	4,575.00	4,965.40	3836.90	11,859,256	10,005,989
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	7,313.74	7,946.82	7322.07	19,406,808	16,374,071
Total	11,888.74	12,912.22	11,158.97	31,266,064	26,380,060

4.3 Trip Type Information

Dana Reserve Residential - San Luis Obispo County, Annual

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	90	6	4
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	90	6	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.507600	0.225400	0.169300	0.059800	0.000800	0.001000	0.007400	0.017400	0.000000	0.004400	0.002600	0.001200	0.003100
Other Asphalt Surfaces	0.507600	0.225400	0.169300	0.059800	0.000800	0.001000	0.007400	0.017400	0.000000	0.004400	0.002600	0.001200	0.003100
Single Family Housing	0.507600	0.225400	0.169300	0.059800	0.000800	0.001000	0.007400	0.017400	0.000000	0.004400	0.002600	0.001200	0.003100

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

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	118.3131	118.3131	0.0190	1.9900e-003	119.3814
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	484.3693	484.3693	0.0776	8.1700e-003	488.7426
NaturalGas Mitigated	0.1521	1.2995	0.5530	8.2900e-003		0.1051	0.1051		0.1051	0.1051	0.0000	1,504.9532	1,504.9532	0.0288	0.0276	1,513.8964
NaturalGas Unmitigated	0.1521	1.2995	0.5530	8.2900e-003		0.1051	0.1051		0.1051	0.1051	0.0000	1,504.9532	1,504.9532	0.0288	0.0276	1,513.8964

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	6.01935e+006	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224	0.0000	321.2155	321.2155	6.1600e-003	5.8900e-003	323.1244
Single Family Housing	2.21824e+007	0.1196	1.0221	0.4350	6.5200e-003		0.0826	0.0826		0.0826	0.0826	0.0000	1,183.7377	1,183.7377	0.0227	0.0217	1,190.7721
Total		**0.1521**	**1.2995**	**0.5530**	**8.2900e-003**		**0.1051**	**0.1051**		**0.1051**	**0.1051**	**0.0000**	**1,504.9532**	**1,504.9532**	**0.0289**	**0.0276**	**1,513.8964**

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					
Apartments Low Rise	6.01935e+006	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224	0.0000	321.2155	321.2155	6.1600e-003	5.8900e-003	323.1244
Single Family Housing	2.21824e+007	0.1196	1.0221	0.4350	6.5200e-003		0.0826	0.0826		0.0826	0.0826	0.0000	1,183.7377	1,183.7377	0.0227	0.0217	1,190.7721
Total		**0.1521**	**1.2995**	**0.5530**	**8.2900e-003**		**0.1051**	**0.1051**		**0.1051**	**0.1051**	**0.0000**	**1,504.9532**	**1,504.9532**	**0.0289**	**0.0276**	**1,513.8964**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.47722e+006	133.2869	0.0214	2.2500e-003	134.4904
Single Family Housing	6.52507e+006	351.0823	0.0562	5.9200e-003	354.2522
Total		**484.3693**	**0.0776**	**8.1700e-003**	**488.7426**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	602660	32.4262	5.1900e-003	5.5000e-004	32.7190
Single Family Housing	1.59626e+006	85.8869	0.0138	1.4500e-003	86.6624
Total		**118.3131**	**0.0190**	**2.0000e-003**	**119.3814**

6.0 Area Detail

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

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	9.6397	0.2259	19.5922	1.0400e-003		0.1089	0.1089		0.1089	0.1089	0.0000	32.0885	32.0885	0.0306	0.0000	32.8529
Unmitigated	9.6397	0.2259	19.5922	1.0400e-003		0.1089	0.1089		0.1089	0.1089	0.0000	32.0885	32.0885	0.0306	0.0000	32.8529

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	0.6600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.3937					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	0.5861	0.2259	19.5922	1.0400e-003		0.1089	0.1089		0.1089	0.1089	0.0000	32.0885	32.0885	0.0306	0.0000	32.8529
Total	**9.6397**	**0.2259**	**19.5922**	**1.0400e-003**		**0.1089**	**0.1089**		**0.1089**	**0.1089**	**0.0000**	**32.0885**	**32.0885**	**0.0306**	**0.0000**	**32.8529**

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	0.6600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.3937					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	0.5861	0.2259	19.5922	1.0400e-003		0.1089	0.1089		0.1089	0.1089	0.0000	32.0885	32.0885	0.0306	0.0000	32.8529
Total	**9.6397**	**0.2259**	**19.5922**	**1.0400e-003**		**0.1089**	**0.1089**		**0.1089**	**0.1089**	**0.0000**	**32.0885**	**32.0885**	**0.0306**	**0.0000**	**32.8529**

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	56.2406	2.4560	0.0584	135.0492
Unmitigated	68.3614	3.0697	0.0730	166.8546

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	39.744 / 25.056	28.8985	1.2977	0.0309	70.5345
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	54.2733 / 34.2158	39.4630	1.7721	0.0421	96.3201
Total		**68.3614**	**3.0697**	**0.0730**	**166.8546**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	31.7952 / 23.5276	23.7746	1.0382	0.0247	57.0894
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	43.4186 / 32.1286	32.4660	1.4178	0.0337	77.9598
Total		**56.2406**	**2.4560**	**0.0584**	**135.0492**

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	127.6022	7.5411	0.0000	316.1289
Unmitigated	255.2043	15.0821	0.0000	632.2579

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	280.6	56.9593	3.3662	0.0000	141.1142
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	976.62	198.2450	11.7160	0.0000	491.1437
Total		**255.2043**	**15.0822**	**0.0000**	**632.2579**

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	140.3	28.4796	1.6831	0.0000	70.5571
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	488.31	99.1225	5.8580	0.0000	245.5718
Total		**127.6022**	**7.5411**	**0.0000**	**316.1289**

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

11.0 Vegetation

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dana Reserve Residential

San Luis Obispo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	55.20	Acre	55.20	2,404,512.00	0
Apartments Low Rise	610.00	Dwelling Unit	23.50	610,000.00	1745
Single Family Housing	833.00	Dwelling Unit	149.50	1,499,400.00	2382

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2031
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	118.62	**CH4 Intensity (lb/MWhr)**	0.019	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Utility Intensity Factor based on renewable portfolio standars for PG&E for the year of 2031.

Land Use - Apartment Low Rise land use also includes 152 accessory dwelling units (ADU's) as per the traffic report. Lot acreage based on specific plan, other non-asphalt surfaces is included to account for grading of entire project.

Construction Phase - Construction phasing is based on the anticipated building schedule for Dana Reserve.

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Trips and VMT - defualts

Demolition - No structures are currently on the project site.

Grading - Defualts

Architectural Coating -

Vehicle Trips - Trip gen for Weekday and sunday is based on traffic report, sat was left default. Trip length was also left as default. Trip type was based on traffic report.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Use low VOC paint (50g/L)

Construction Off-road Equipment Mitigation - Soil stabilizers, Water exposed areas, and use tier 3 engines.

Mobile Land Use Mitigation - 75 units will be "affordable"

Area Mitigation - Use Low VOC Paints

Energy Mitigation - Based on average residential solar systems production and residential usage 75% of electicity generated will be from residential solar. Use energy efficient appliances.

Water Mitigation - Install low flow fixtures and irrigation.

Waste Mitigation -

Fleet Mix - Based on SJVAPCD Residential fleet mix for year 2031.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaCoating	Area_Parking	170407	0
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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	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 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	300.00	108.00
tblConstructionPhase	NumDays	180.00	108.00
tblConstructionPhase	NumDays	465.00	130.00

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	4,650.00	1,805.00
tblConstructionPhase	NumDays	330.00	1,783.00
tblConstructionPhase	NumDays	330.00	220.00
tblDemolition	PhaseName	Demolition	Grubbing
tblFleetMix	HHD	5.8820e-003	0.02
tblFleetMix	HHD	5.8820e-003	0.02
tblFleetMix	HHD	5.8820e-003	0.02
tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDT1	0.06	0.23
tblFleetMix	LDT1	0.06	0.23
tblFleetMix	LDT1	0.06	0.23
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD2	7.5650e-003	1.0000e-003
tblFleetMix	LHD2	7.5650e-003	1.0000e-003
tblFleetMix	LHD2	7.5650e-003	1.0000e-003
tblFleetMix	MCY	0.03	2.6000e-003
tblFleetMix	MCY	0.03	2.6000e-003
tblFleetMix	MCY	0.03	2.6000e-003
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MH	4.5540e-003	3.1000e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	MH	4.5540e-003	3.1000e-003
tblFleetMix	MH	4.5540e-003	3.1000e-003
tblFleetMix	MHD	8.3110e-003	7.4000e-003
tblFleetMix	MHD	8.3110e-003	7.4000e-003
tblFleetMix	MHD	8.3110e-003	7.4000e-003
tblFleetMix	OBUS	8.7600e-004	0.00
tblFleetMix	OBUS	8.7600e-004	0.00
tblFleetMix	OBUS	8.7600e-004	0.00
tblFleetMix	SBUS	7.6800e-004	1.2000e-003
tblFleetMix	SBUS	7.6800e-004	1.2000e-003
tblFleetMix	SBUS	7.6800e-004	1.2000e-003
tblFleetMix	UBUS	3.4400e-004	4.4000e-003
tblFleetMix	UBUS	3.4400e-004	4.4000e-003
tblFleetMix	UBUS	3.4400e-004	4.4000e-003
tblLandUse	LotAcreage	38.13	23.50
tblLandUse	LotAcreage	270.45	149.50
tblOffRoadEquipment	PhaseName	Demolition	Grubbing
tblOffRoadEquipment	PhaseName	Demolition	Grubbing
tblOffRoadEquipment	PhaseName	Demolition	Grubbing
tblOnRoadDust	PhaseName	Demolition	Grubbing
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.019
tblProjectCharacteristics	CO2IntensityFactor	203.98	118.62
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.002
tblTripsAndVMT	PhaseName	Demolition	Grubbing
tblVehicleTrips	DV_TP	11.00	6.00
tblVehicleTrips	DV_TP	11.00	6.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PR_TP	86.00	90.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	PR_TP	86.00	90.00
tblVehicleTrips	SU_TR	6.28	6.29
tblVehicleTrips	SU_TR	8.55	8.79
tblVehicleTrips	WD_TR	7.32	7.50
tblVehicleTrips	WD_TR	9.44	8.78

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.0328	49.0776	38.7874	0.0797	19.9833	2.2651	22.2484	10.1890	2.0942	12.2832	0.0000	7,716.2671	7,716.2671	2.2491	7.2000e-003	7,774.6395
2024	46.9284	43.3505	84.6484	0.3078	25.7971	0.9211	26.7182	6.9077	0.8703	7.7781	0.0000	31,874.7880	31,874.7880	1.2982	1.8938	32,471.5943
2025	46.4122	41.3459	80.6374	0.3001	25.7974	0.8179	26.6154	6.9079	0.7728	7.6806	0.0000	31,262.8042	31,262.8042	1.2565	1.8374	31,841.7522
2026	46.0611	40.4650	77.3330	0.2929	25.7977	0.8095	26.6072	6.9080	0.7648	7.6728	0.0000	30,664.8050	30,664.8050	1.2241	1.7856	31,227.5008
2027	45.7339	39.6669	74.4974	0.2860	25.7980	0.8006	26.5986	6.9081	0.7564	7.6645	0.0000	30,083.4941	30,083.4941	1.1958	1.7360	30,630.7159
2028	45.4161	38.9843	72.1218	0.2797	25.7983	0.7919	26.5902	6.9082	0.7483	7.6565	0.0000	29,548.6971	29,548.6971	1.1723	1.6909	30,081.9073
2029	45.1061	38.3277	70.0395	0.2737	25.7986	0.7833	26.5818	6.9083	0.7403	7.6486	0.0000	29,044.0436	29,044.0436	1.1517	1.6483	29,564.0188
2030	46.1288	40.1128	84.4681	0.3015	25.9471	0.6961	26.6432	6.9477	0.6849	7.6326	0.0000	31,703.3450	31,703.3450	0.7707	1.6134	32,203.4158
Maximum	**46.9284**	**49.0776**	**84.6484**	**0.3078**	**25.9471**	**2.2651**	**26.7182**	**10.1890**	**2.0942**	**12.2832**	**0.0000**	**31,874.7880**	**31,874.7880**	**2.2491**	**1.8938**	**32,471.5943**

Dana Reserve Residential - San Luis Obispo 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)

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					
2023	1.9600	37.4476	48.5337	0.0797	7.9925	1.8105	9.8029	4.0265	1.8103	5.8368	0.0000	7,716.2671	7,716.2671	2.2491	7.2000e-003	7,774.6395
2024	46.0094	44.2710	86.3777	0.3078	25.7971	1.2455	27.0426	6.9077	1.2311	8.1389	0.0000	31,874.7880	31,874.7880	1.2982	1.8938	32,471.5943
2025	45.6073	43.3138	82.4498	0.3001	25.7974	1.2375	27.0349	6.9079	1.2236	8.1315	0.0000	31,262.8042	31,262.8042	1.2565	1.8374	31,841.7522
2026	45.2561	42.4328	79.1454	0.2929	25.7977	1.2291	27.0268	6.9080	1.2157	8.1236	0.0000	30,664.8050	30,664.8050	1.2241	1.7856	31,227.5008
2027	44.9289	41.6347	76.3097	0.2860	25.7980	1.2201	27.0182	6.9081	1.2073	8.1154	0.0000	30,083.4941	30,083.4941	1.1958	1.7360	30,630.7159
2028	44.6111	40.9522	73.9342	0.2797	25.7983	1.2114	27.0097	6.9082	1.1992	8.1073	0.0000	29,548.6971	29,548.6971	1.1723	1.6909	30,081.9073
2029	44.3011	40.2955	71.8519	0.2737	25.7986	1.2029	27.0014	6.9083	1.1912	8.0994	0.0000	29,044.0436	29,044.0436	1.1517	1.6483	29,564.0188
2030	44.5986	51.0800	87.6657	0.3015	25.9471	1.8050	27.7521	6.9477	1.7938	8.7415	0.0000	31,703.3449	31,703.3449	0.7707	1.6134	32,203.4158
Maximum	**46.0094**	**51.0800**	**87.6657**	**0.3078**	**25.9471**	**1.8105**	**27.7521**	**6.9477**	**1.8103**	**8.7415**	**0.0000**	**31,874.7880**	**31,874.7880**	**2.2491**	**1.8938**	**32,471.5943**

	ROG	NOx	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	**2.92**	**-3.05**	**-4.07**	**0.00**	**5.97**	**-39.01**	**4.27**	**10.52**	**-46.29**	**4.12**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Dana Reserve Residential - San Luis Obispo 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	53.1610	1.3688	118.7403	6.2900e-003		0.6602	0.6602		0.6602	0.6602	0.0000	214.3731	214.3731	0.2043	0.0000	219.4796
Energy	0.8333	7.1205	3.0300	0.0455		0.5757	0.5757		0.5757	0.5757		9,090.0109	9,090.0109	0.1742	0.1667	9,144.0283
Mobile	14.0244	28.1643	158.1323	0.5512	71.2553	0.3693	71.6246	18.9702	0.3453	19.3155		59,836.7667	59,836.7667	1.6248	2.5086	60,624.9436
Total	**68.0186**	**36.6537**	**279.9026**	**0.6030**	**71.2553**	**1.6052**	**72.8605**	**18.9702**	**1.5812**	**20.5514**	**0.0000**	**69,141.1506**	**69,141.1506**	**2.0033**	**2.6752**	**69,988.4515**

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	53.1610	1.3688	118.7403	6.2900e-003		0.6602	0.6602		0.6602	0.6602	0.0000	214.3731	214.3731	0.2043	0.0000	219.4796
Energy	0.8333	7.1205	3.0300	0.0455		0.5757	0.5757		0.5757	0.5757		9,090.0109	9,090.0109	0.1742	0.1667	9,144.0283
Mobile	13.6627	25.0688	141.0777	0.4679	60.1201	0.3176	60.4377	16.0057	0.2969	16.3026		50,786.6620	50,786.6620	1.5139	2.2169	51,485.1423
Total	**67.6569**	**33.5581**	**262.8481**	**0.5196**	**60.1201**	**1.5535**	**61.6736**	**16.0057**	**1.5328**	**17.5385**	**0.0000**	**60,091.0460**	**60,091.0460**	**1.8924**	**2.3835**	**60,848.6502**

Dana Reserve Residential - San Luis Obispo 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	**0.53**	**8.45**	**6.09**	**13.83**	**15.63**	**3.22**	**15.35**	**15.63**	**3.06**	**14.66**	**0.00**	**13.09**	**13.09**	**5.54**	**10.90**	**13.06**

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	1/2/2023	5/31/2023	5	108	
2	Site Preparation	Site Preparation	2/1/2023	6/30/2023	5	108	
3	Grading	Grading	7/3/2023	12/29/2023	5	130	
4	Building Construction	Building Construction	1/1/2024	11/29/2030	5	1805	
5	Architectural Coating	Architectural Coating	3/1/2024	12/31/2030	5	1783	
6	Paving	Paving	2/1/2030	12/5/2030	5	220	

Acres of Grading (Site Preparation Phase): 162

Acres of Grading (Grading Phase): 390

Acres of Paving: 55.2

Residential Indoor: 4,271,535; Residential Outdoor: 1,423,845; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 170,407 (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	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,932.00	620.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	386.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grubbing - 2023

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	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**		**0.9975**	**0.9975**		**0.9280**	**0.9280**		**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

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	0.0474	0.0314	0.4090	1.2500e-003	0.1483	7.1000e-004	0.1490	0.0393	6.6000e-004	0.0400		128.1704	128.1704	3.2500e-003	3.2700e-003	129.2270
Total	**0.0474**	**0.0314**	**0.4090**	**1.2500e-003**	**0.1483**	**7.1000e-004**	**0.1490**	**0.0393**	**6.6000e-004**	**0.0400**		**128.1704**	**128.1704**	**3.2500e-003**	**3.2700e-003**	**129.2270**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grubbing - 2023

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	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**0.9246**	**18.3130**	**24.6739**	**0.0388**		**0.8627**	**0.8627**		**0.8627**	**0.8627**	**0.0000**	**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

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	0.0474	0.0314	0.4090	1.2500e-003	0.1483	7.1000e-004	0.1490	0.0393	6.6000e-004	0.0400		128.1704	128.1704	3.2500e-003	3.2700e-003	129.2270
Total	**0.0474**	**0.0314**	**0.4090**	**1.2500e-003**	**0.1483**	**7.1000e-004**	**0.1490**	**0.0393**	**6.6000e-004**	**0.0400**		**128.1704**	**128.1704**	**3.2500e-003**	**3.2700e-003**	**129.2270**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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	0.0569	0.0376	0.4908	1.5000e-003	0.1780	8.5000e-004	0.1788	0.0472	7.9000e-004	0.0480		153.8045	153.8045	3.9000e-003	3.9300e-003	155.0724
Total	**0.0569**	**0.0376**	**0.4908**	**1.5000e-003**	**0.1780**	**8.5000e-004**	**0.1788**	**0.0472**	**7.9000e-004**	**0.0480**		**153.8045**	**153.8045**	**3.9000e-003**	**3.9300e-003**	**155.0724**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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	0.9312	19.0656	22.9600	0.0381		0.9462	0.9462		0.9462	0.9462	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**0.9312**	**19.0656**	**22.9600**	**0.0381**	**7.6662**	**0.9462**	**8.6124**	**3.9400**	**0.9462**	**4.8861**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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	0.0569	0.0376	0.4908	1.5000e-003	0.1780	8.5000e-004	0.1788	0.0472	7.9000e-004	0.0480		153.8045	153.8045	3.9000e-003	3.9300e-003	155.0724
Total	**0.0569**	**0.0376**	**0.4908**	**1.5000e-003**	**0.1780**	**8.5000e-004**	**0.1788**	**0.0472**	**7.9000e-004**	**0.0480**		**153.8045**	**153.8045**	**3.9000e-003**	**3.9300e-003**	**155.0724**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**9.2036**	**1.4245**	**10.6281**	**3.6538**	**1.3105**	**4.9643**		**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

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	0.0632	0.0418	0.5453	1.6700e-003	0.1977	9.5000e-004	0.1987	0.0524	8.7000e-004	0.0533		170.8939	170.8939	4.3300e-003	4.3600e-003	172.3027
Total	**0.0632**	**0.0418**	**0.5453**	**1.6700e-003**	**0.1977**	**9.5000e-004**	**0.1987**	**0.0524**	**8.7000e-004**	**0.0533**		**170.8939**	**170.8939**	**4.3300e-003**	**4.3600e-003**	**172.3027**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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	1.5231	29.9782	36.7226	0.0621		1.2994	1.2994		1.2994	1.2994	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**1.5231**	**29.9782**	**36.7226**	**0.0621**	**3.5894**	**1.2994**	**4.8888**	**1.4250**	**1.2994**	**2.7244**	**0.0000**	**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

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	0.0632	0.0418	0.5453	1.6700e-003	0.1977	9.5000e-004	0.1987	0.0524	8.7000e-004	0.0533		170.8939	170.8939	4.3300e-003	4.3600e-003	172.3027
Total	**0.0632**	**0.0418**	**0.5453**	**1.6700e-003**	**0.1977**	**9.5000e-004**	**0.1987**	**0.0524**	**8.7000e-004**	**0.0533**		**170.8939**	**170.8939**	**4.3300e-003**	**4.3600e-003**	**172.3027**

Dana Reserve Residential - San Luis Obispo 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	0.7114	24.3688	7.9048	0.0905	2.8811	0.1424	3.0235	0.8299	0.1363	0.9662		9,701.3984	9,701.3984	0.2222	1.4236	10,131.1907
Worker	5.7399	3.5999	48.9807	0.1562	19.1000	0.0870	19.1870	5.0657	0.0802	5.1459		16,116.3161	16,116.3161	0.3798	0.3919	16,242.5954
Total	**6.4513**	**27.9687**	**56.8855**	**0.2467**	**21.9811**	**0.2295**	**22.2105**	**5.8956**	**0.2165**	**6.1121**		**25,817.7145**	**25,817.7145**	**0.6021**	**1.8155**	**26,373.7861**

Dana Reserve Residential - San Luis Obispo 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

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.7114	24.3688	7.9048	0.0905	2.8811	0.1424	3.0235	0.8299	0.1363	0.9662		9,701.3984	9,701.3984	0.2222	1.4236	10,131.1907
Worker	5.7399	3.5999	48.9807	0.1562	19.1000	0.0870	19.1870	5.0657	0.0802	5.1459		16,116.3161	16,116.3161	0.3798	0.3919	16,242.5954
Total	**6.4513**	**27.9687**	**56.8855**	**0.2467**	**21.9811**	**0.2295**	**22.2105**	**5.8956**	**0.2165**	**6.1121**		**25,817.7145**	**25,817.7145**	**0.6021**	**1.8155**	**26,373.7861**

Dana Reserve Residential - San Luis Obispo 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	0.6893	23.8506	7.7839	0.0888	2.8814	0.1391	3.0205	0.8301	0.1331	0.9631		9,533.0833	9,533.0833	0.2257	1.3979	9,955.2925
Worker	5.4231	3.2340	45.8077	0.1511	19.1000	0.0832	19.1832	5.0657	0.0766	5.1423		15,745.8821	15,745.8821	0.3455	0.3663	15,863.6785
Total	**6.1124**	**27.0846**	**53.5916**	**0.2399**	**21.9814**	**0.2223**	**22.2036**	**5.8958**	**0.2097**	**6.1054**		**25,278.9654**	**25,278.9654**	**0.5711**	**1.7642**	**25,818.9710**

Dana Reserve Residential - San Luis Obispo 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

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.6893	23.8506	7.7839	0.0888	2.8814	0.1391	3.0205	0.8301	0.1331	0.9631		9,533.0833	9,533.0833	0.2257	1.3979	9,955.2925
Worker	5.4231	3.2340	45.8077	0.1511	19.1000	0.0832	19.1832	5.0657	0.0766	5.1423		15,745.8821	15,745.8821	0.3455	0.3663	15,863.6785
Total	**6.1124**	**27.0846**	**53.5916**	**0.2399**	**21.9814**	**0.2223**	**22.2036**	**5.8958**	**0.2097**	**6.1054**		**25,278.9654**	**25,278.9654**	**0.5711**	**1.7642**	**25,818.9710**

Dana Reserve Residential - San Luis Obispo 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	0.6693	23.3331	7.6925	0.0872	2.8817	0.1354	3.0171	0.8302	0.1295	0.9597		9,361.9336	9,361.9336	0.2290	1.3718	9,776.4421
Worker	5.1471	2.9311	43.1297	0.1465	19.1000	0.0792	19.1792	5.0657	0.0729	5.1386		15,390.1128	15,390.1128	0.3157	0.3449	15,500.7817
Total	**5.8164**	**26.2642**	**50.8222**	**0.2337**	**21.9817**	**0.2146**	**22.1963**	**5.8959**	**0.2025**	**6.0983**		**24,752.0463**	**24,752.0463**	**0.5447**	**1.7166**	**25,277.2238**

Dana Reserve Residential - San Luis Obispo 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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.6693	23.3331	7.6925	0.0872	2.8817	0.1354	3.0171	0.8302	0.1295	0.9597		9,361.9336	9,361.9336	0.2290	1.3718	9,776.4421
Worker	5.1471	2.9311	43.1297	0.1465	19.1000	0.0792	19.1792	5.0657	0.0729	5.1386		15,390.1128	15,390.1128	0.3157	0.3449	15,500.7817
Total	**5.8164**	**26.2642**	**50.8222**	**0.2337**	**21.9817**	**0.2146**	**22.1963**	**5.8959**	**0.2025**	**6.0983**		**24,752.0463**	**24,752.0463**	**0.5447**	**1.7166**	**25,277.2238**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2027

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	0.6517	22.8439	7.6187	0.0854	2.8820	0.1319	3.0139	0.8303	0.1262	0.9565		9,177.3210	9,177.3210	0.2320	1.3440	9,583.6359
Worker	4.8891	2.6736	40.8277	0.1423	19.1000	0.0747	19.1747	5.0657	0.0688	5.1345		15,059.4739	15,059.4739	0.2897	0.3267	15,164.0747
Total	**5.5408**	**25.5175**	**48.4465**	**0.2276**	**21.9820**	**0.2066**	**22.1886**	**5.8960**	**0.1949**	**6.0909**		**24,236.7948**	**24,236.7948**	**0.5216**	**1.6707**	**24,747.7106**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2027

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.6517	22.8439	7.6187	0.0854	2.8820	0.1319	3.0139	0.8303	0.1262	0.9565		9,177.3210	9,177.3210	0.2320	1.3440	9,583.6359
Worker	4.8891	2.6736	40.8277	0.1423	19.1000	0.0747	19.1747	5.0657	0.0688	5.1345		15,059.4739	15,059.4739	0.2897	0.3267	15,164.0747
Total	**5.5408**	**25.5175**	**48.4465**	**0.2276**	**21.9820**	**0.2066**	**22.1886**	**5.8960**	**0.1949**	**6.0909**		**24,236.7948**	**24,236.7948**	**0.5216**	**1.6707**	**24,747.7106**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2028

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	0.6359	22.4211	7.5641	0.0837	2.8823	0.1287	3.0110	0.8304	0.1231	0.9535		9,001.1142	9,001.1142	0.2355	1.3174	9,399.5887
Worker	4.6374	2.4571	38.8933	0.1384	19.1000	0.0701	19.1701	5.0657	0.0645	5.1302		14,760.5971	14,760.5971	0.2671	0.3113	14,860.0543
Total	**5.2732**	**24.8782**	**46.4574**	**0.2221**	**21.9823**	**0.1988**	**22.1810**	**5.8961**	**0.1876**	**6.0837**		**23,761.7113**	**23,761.7113**	**0.5027**	**1.6287**	**24,259.6431**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2028

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.6359	22.4211	7.5641	0.0837	2.8823	0.1287	3.0110	0.8304	0.1231	0.9535		9,001.1142	9,001.1142	0.2355	1.3174	9,399.5887
Worker	4.6374	2.4571	38.8933	0.1384	19.1000	0.0701	19.1701	5.0657	0.0645	5.1302		14,760.5971	14,760.5971	0.2671	0.3113	14,860.0543
Total	**5.2732**	**24.8782**	**46.4574**	**0.2221**	**21.9823**	**0.1988**	**22.1810**	**5.8961**	**0.1876**	**6.0837**		**23,761.7113**	**23,761.7113**	**0.5027**	**1.6287**	**24,259.6431**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2029

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	0.6206	21.9863	7.5143	0.0820	2.8825	0.1254	3.0079	0.8305	0.1199	0.9504		8,822.2775	8,822.2775	0.2390	1.2904	9,212.8008
Worker	4.3917	2.2722	37.1993	0.1349	19.1000	0.0657	19.1657	5.0657	0.0605	5.1262		14,489.0362	14,489.0362	0.2471	0.2983	14,584.0897
Total	**5.0123**	**24.2585**	**44.7136**	**0.2169**	**21.9825**	**0.1911**	**22.1736**	**5.8962**	**0.1804**	**6.0766**		**23,311.3138**	**23,311.3138**	**0.4860**	**1.5887**	**23,796.8904**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2029

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.6206	21.9863	7.5143	0.0820	2.8825	0.1254	3.0079	0.8305	0.1199	0.9504		8,822.2775	8,822.2775	0.2390	1.2904	9,212.8008
Worker	4.3917	2.2722	37.1993	0.1349	19.1000	0.0657	19.1657	5.0657	0.0605	5.1262		14,489.0362	14,489.0362	0.2471	0.2983	14,584.0897
Total	**5.0123**	**24.2585**	**44.7136**	**0.2169**	**21.9825**	**0.1911**	**22.1736**	**5.8962**	**0.1804**	**6.0766**		**23,311.3138**	**23,311.3138**	**0.4860**	**1.5887**	**23,796.8904**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2030

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	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**		**2,897.5468**	**2,897.5468**	**0.1162**		**2,900.4529**

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	0.6084	21.6495	7.4863	0.0804	2.8827	0.1228	3.0055	0.8306	0.1174	0.9480		8,663.8559	8,663.8559	0.2418	1.2668	9,047.3947
Worker	4.1555	2.1135	35.7561	0.1318	19.1000	0.0615	19.1615	5.0657	0.0566	5.1223		14,246.9287	14,246.9287	0.2292	0.2871	14,338.2102
Total	**4.7638**	**23.7630**	**43.2424**	**0.2122**	**21.9827**	**0.1843**	**22.1670**	**5.8963**	**0.1741**	**6.0703**		**22,910.7845**	**22,910.7845**	**0.4710**	**1.5539**	**23,385.6050**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2030

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	0.6739	14.2261	17.8738	0.0310		0.9036	0.9036		0.9036	0.9036	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	**0.6739**	**14.2261**	**17.8738**	**0.0310**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,897.5468**	**2,897.5468**	**0.1162**		**2,900.4529**

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	0.6084	21.6495	7.4863	0.0804	2.8827	0.1228	3.0055	0.8306	0.1174	0.9480		8,663.8559	8,663.8559	0.2418	1.2668	9,047.3947
Worker	4.1555	2.1135	35.7561	0.1318	19.1000	0.0615	19.1615	5.0657	0.0566	5.1223		14,246.9287	14,246.9287	0.2292	0.2871	14,338.2102
Total	**4.7638**	**23.7630**	**43.2424**	**0.2122**	**21.9827**	**0.1843**	**22.1670**	**5.8963**	**0.1741**	**6.0703**		**22,910.7845**	**22,910.7845**	**0.4710**	**1.5539**	**23,385.6050**

Dana Reserve Residential - San Luis Obispo 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	37.6781					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	**37.8588**	**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	1.1468	0.7192	9.7860	0.0312	3.8161	0.0174	3.8334	1.0121	0.0160	1.0281		3,219.9265	3,219.9265	0.0759	0.0783	3,245.1562
Total	**1.1468**	**0.7192**	**9.7860**	**0.0312**	**3.8161**	**0.0174**	**3.8334**	**1.0121**	**0.0160**	**1.0281**		**3,219.9265**	**3,219.9265**	**0.0759**	**0.0783**	**3,245.1562**

Dana Reserve Residential - San Luis Obispo 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

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	37.6781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**37.7375**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	1.1468	0.7192	9.7860	0.0312	3.8161	0.0174	3.8334	1.0121	0.0160	1.0281		3,219.9265	3,219.9265	0.0759	0.0783	3,245.1562
Total	**1.1468**	**0.7192**	**9.7860**	**0.0312**	**3.8161**	**0.0174**	**3.8334**	**1.0121**	**0.0160**	**1.0281**		**3,219.9265**	**3,219.9265**	**0.0759**	**0.0783**	**3,245.1562**

Dana Reserve Residential - San Luis Obispo 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	37.6781					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	**37.8489**	**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	1.0835	0.6461	9.1521	0.0302	3.8161	0.0166	3.8327	1.0121	0.0153	1.0274		3,145.9164	3,145.9164	0.0690	0.0732	3,169.4513
Total	**1.0835**	**0.6461**	**9.1521**	**0.0302**	**3.8161**	**0.0166**	**3.8327**	**1.0121**	**0.0153**	**1.0274**		**3,145.9164**	**3,145.9164**	**0.0690**	**0.0732**	**3,169.4513**

Dana Reserve Residential - San Luis Obispo 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

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	37.6781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**37.7375**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	1.0835	0.6461	9.1521	0.0302	3.8161	0.0166	3.8327	1.0121	0.0153	1.0274		3,145.9164	3,145.9164	0.0690	0.0732	3,169.4513
Total	**1.0835**	**0.6461**	**9.1521**	**0.0302**	**3.8161**	**0.0166**	**3.8327**	**1.0121**	**0.0153**	**1.0274**		**3,145.9164**	**3,145.9164**	**0.0690**	**0.0732**	**3,169.4513**

Dana Reserve Residential - San Luis Obispo 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	37.6781					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	**37.8489**	**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	1.0284	0.5856	8.6170	0.0293	3.8161	0.0158	3.8319	1.0121	0.0146	1.0267		3,074.8362	3,074.8362	0.0631	0.0689	3,096.9471
Total	**1.0284**	**0.5856**	**8.6170**	**0.0293**	**3.8161**	**0.0158**	**3.8319**	**1.0121**	**0.0146**	**1.0267**		**3,074.8362**	**3,074.8362**	**0.0631**	**0.0689**	**3,096.9471**

Dana Reserve Residential - San Luis Obispo 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

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	37.6781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**37.7375**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	1.0284	0.5856	8.6170	0.0293	3.8161	0.0158	3.8319	1.0121	0.0146	1.0267		3,074.8362	3,074.8362	0.0631	0.0689	3,096.9471
Total	**1.0284**	**0.5856**	**8.6170**	**0.0293**	**3.8161**	**0.0158**	**3.8319**	**1.0121**	**0.0146**	**1.0267**		**3,074.8362**	**3,074.8362**	**0.0631**	**0.0689**	**3,096.9471**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2027

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	37.6781					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	**37.8489**	**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	0.9768	0.5342	8.1571	0.0284	3.8161	0.0149	3.8310	1.0121	0.0137	1.0258		3,008.7769	3,008.7769	0.0579	0.0653	3,029.6754
Total	**0.9768**	**0.5342**	**8.1571**	**0.0284**	**3.8161**	**0.0149**	**3.8310**	**1.0121**	**0.0137**	**1.0258**		**3,008.7769**	**3,008.7769**	**0.0579**	**0.0653**	**3,029.6754**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2027

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	37.6781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**37.7375**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	0.9768	0.5342	8.1571	0.0284	3.8161	0.0149	3.8310	1.0121	0.0137	1.0258		3,008.7769	3,008.7769	0.0579	0.0653	3,029.6754
Total	**0.9768**	**0.5342**	**8.1571**	**0.0284**	**3.8161**	**0.0149**	**3.8310**	**1.0121**	**0.0137**	**1.0258**		**3,008.7769**	**3,008.7769**	**0.0579**	**0.0653**	**3,029.6754**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

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	37.6781					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	**37.8489**	**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	0.9265	0.4909	7.7706	0.0277	3.8161	0.0140	3.8300	1.0121	0.0129	1.0250		2,949.0634	2,949.0634	0.0534	0.0622	2,968.9343
Total	**0.9265**	**0.4909**	**7.7706**	**0.0277**	**3.8161**	**0.0140**	**3.8300**	**1.0121**	**0.0129**	**1.0250**		**2,949.0634**	**2,949.0634**	**0.0534**	**0.0622**	**2,968.9343**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

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	37.6781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**37.7375**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	0.9265	0.4909	7.7706	0.0277	3.8161	0.0140	3.8300	1.0121	0.0129	1.0250		2,949.0634	2,949.0634	0.0534	0.0622	2,968.9343
Total	**0.9265**	**0.4909**	**7.7706**	**0.0277**	**3.8161**	**0.0140**	**3.8300**	**1.0121**	**0.0129**	**1.0250**		**2,949.0634**	**2,949.0634**	**0.0534**	**0.0622**	**2,968.9343**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

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	37.6781					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	**37.8489**	**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	0.8774	0.4540	7.4322	0.0270	3.8161	0.0131	3.8292	1.0121	0.0121	1.0242		2,894.8074	2,894.8074	0.0494	0.0596	2,913.7985
Total	**0.8774**	**0.4540**	**7.4322**	**0.0270**	**3.8161**	**0.0131**	**3.8292**	**1.0121**	**0.0121**	**1.0242**		**2,894.8074**	**2,894.8074**	**0.0494**	**0.0596**	**2,913.7985**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

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	37.6781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**37.7375**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	0.8774	0.4540	7.4322	0.0270	3.8161	0.0131	3.8292	1.0121	0.0121	1.0242		2,894.8074	2,894.8074	0.0494	0.0596	2,913.7985
Total	**0.8774**	**0.4540**	**7.4322**	**0.0270**	**3.8161**	**0.0131**	**3.8292**	**1.0121**	**0.0121**	**1.0242**		**2,894.8074**	**2,894.8074**	**0.0494**	**0.0596**	**2,913.7985**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2030

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	37.6781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	**37.8088**	**0.8563**	**1.7977**	**2.9700e-003**		**0.0203**	**0.0203**		**0.0203**	**0.0203**		**281.4481**	**281.4481**	**0.0114**		**281.7328**

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	0.8302	0.4223	7.1438	0.0263	3.8161	0.0123	3.8283	1.0121	0.0113	1.0234		2,846.4361	2,846.4361	0.0458	0.0574	2,864.6735
Total	**0.8302**	**0.4223**	**7.1438**	**0.0263**	**3.8161**	**0.0123**	**3.8283**	**1.0121**	**0.0113**	**1.0234**		**2,846.4361**	**2,846.4361**	**0.0458**	**0.0574**	**2,864.6735**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2030

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	37.6781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0114		281.7328
Total	**37.7375**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0114**		**281.7328**

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	0.8302	0.4223	7.1438	0.0263	3.8161	0.0123	3.8283	1.0121	0.0113	1.0234		2,846.4361	2,846.4361	0.0458	0.0574	2,864.6735
Total	**0.8302**	**0.4223**	**7.1438**	**0.0263**	**3.8161**	**0.0123**	**3.8283**	**1.0121**	**0.0113**	**1.0234**		**2,846.4361**	**2,846.4361**	**0.0458**	**0.0574**	**2,864.6735**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2030

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	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.5168	2,656.5168	0.1245		2,659.6302
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3845**	**7.1202**	**15.8495**	**0.0281**		**0.3306**	**0.3306**		**0.3306**	**0.3306**		**2,656.5168**	**2,656.5168**	**0.1245**		**2,659.6302**

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	0.0323	0.0164	0.2776	1.0200e-003	0.1483	4.8000e-004	0.1488	0.0393	4.4000e-004	0.0398		110.6128	110.6128	1.7800e-003	2.2300e-003	111.3215
Total	**0.0323**	**0.0164**	**0.2776**	**1.0200e-003**	**0.1483**	**4.8000e-004**	**0.1488**	**0.0393**	**4.4000e-004**	**0.0398**		**110.6128**	**110.6128**	**1.7800e-003**	**2.2300e-003**	**111.3215**

Dana Reserve Residential - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2030

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	0.5609	11.2952	17.2957	0.0281		0.6093	0.6093		0.6093	0.6093	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5609**	**11.2952**	**17.2957**	**0.0281**		**0.6093**	**0.6093**		**0.6093**	**0.6093**	**0.0000**	**2,656.5168**	**2,656.5168**	**0.1245**		**2,659.6302**

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	0.0323	0.0164	0.2776	1.0200e-003	0.1483	4.8000e-004	0.1488	0.0393	4.4000e-004	0.0398		110.6128	110.6128	1.7800e-003	2.2300e-003	111.3215
Total	**0.0323**	**0.0164**	**0.2776**	**1.0200e-003**	**0.1483**	**4.8000e-004**	**0.1488**	**0.0393**	**4.4000e-004**	**0.0398**		**110.6128**	**110.6128**	**1.7800e-003**	**2.2300e-003**	**111.3215**

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 Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Integrate Below Market Rate Housing

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	13.6627	25.0688	141.0777	0.4679	60.1201	0.3176	60.4377	16.0057	0.2969	16.3026		50,786.6620	50,786.6620	1.5139	2.2169	51,485.1423
Unmitigated	14.0244	28.1643	158.1323	0.5512	71.2553	0.3693	71.6246	18.9702	0.3453	19.3155		59,836.7667	59,836.7667	1.6248	2.5086	60,624.9436

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	4,575.00	4,965.40	3836.90	11,859,256	10,005,989
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	7,313.74	7,946.82	7322.07	19,406,808	16,374,071
Total	11,888.74	12,912.22	11,158.97	31,266,064	26,380,060

4.3 Trip Type Information

Dana Reserve Residential - San Luis Obispo County, Summer

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	90	6	4
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	90	6	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.507600	0.225400	0.169300	0.059800	0.000800	0.001000	0.007400	0.017400	0.000000	0.004400	0.002600	0.001200	0.003100
Other Asphalt Surfaces	0.507600	0.225400	0.169300	0.059800	0.000800	0.001000	0.007400	0.017400	0.000000	0.004400	0.002600	0.001200	0.003100
Single Family Housing	0.507600	0.225400	0.169300	0.059800	0.000800	0.001000	0.007400	0.017400	0.000000	0.004400	0.002600	0.001200	0.003100

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

Dana Reserve Residential - San Luis Obispo 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	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.8333	7.1205	3.0300	0.0455		0.5757	0.5757		0.5757	0.5757		9,090.0109	9,090.0109	0.1742	0.1667	9,144.0283
NaturalGas Unmitigated	0.8333	7.1205	3.0300	0.0455		0.5757	0.5757		0.5757	0.5757		9,090.0109	9,090.0109	0.1742	0.1667	9,144.0283

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	16491.4	0.1779	1.5198	0.6467	9.7000e-003		0.1229	0.1229		0.1229	0.1229		1,940.1618	1,940.1618	0.0372	0.0356	1,951.6912
Single Family Housing	60773.7	0.6554	5.6007	2.3833	0.0358		0.4528	0.4528		0.4528	0.4528		7,149.8491	7,149.8491	0.1370	0.1311	7,192.3371
Total		**0.8333**	**7.1205**	**3.0300**	**0.0455**		**0.5757**	**0.5757**		**0.5757**	**0.5757**		**9,090.0109**	**9,090.0109**	**0.1742**	**0.1667**	**9,144.0283**

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	lb/day										lb/day					
Apartments Low Rise	16.4914	0.1779	1.5198	0.6467	9.7000e-003		0.1229	0.1229		0.1229	0.1229		1,940.1618	1,940.1618	0.0372	0.0356	1,951.6912
Single Family Housing	60.7737	0.6554	5.6007	2.3833	0.0358		0.4528	0.4528		0.4528	0.4528		7,149.8491	7,149.8491	0.1370	0.1311	7,192.3371
Total		**0.8333**	**7.1205**	**3.0300**	**0.0455**		**0.5757**	**0.5757**		**0.5757**	**0.5757**		**9,090.0109**	**9,090.0109**	**0.1742**	**0.1667**	**9,144.0283**

6.0 Area Detail

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

Dana Reserve Residential - San Luis Obispo 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	53.1610	1.3688	118.7403	6.2900e-003		0.6602	0.6602		0.6602	0.6602	0.0000	214.3731	214.3731	0.2043	0.0000	219.4796
Unmitigated	53.1610	1.3688	118.7403	6.2900e-003		0.6602	0.6602		0.6602	0.6602	0.0000	214.3731	214.3731	0.2043	0.0000	219.4796

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	3.6162					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	45.9928					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	3.5520	1.3688	118.7403	6.2900e-003		0.6602	0.6602		0.6602	0.6602		214.3731	214.3731	0.2043		219.4796
Total	**53.1610**	**1.3688**	**118.7403**	**6.2900e-003**		**0.6602**	**0.6602**		**0.6602**	**0.6602**	**0.0000**	**214.3731**	**214.3731**	**0.2043**	**0.0000**	**219.4796**

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	3.6162					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	45.9928					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	3.5520	1.3688	118.7403	6.2900e-003		0.6602	0.6602		0.6602	0.6602		214.3731	214.3731	0.2043		219.4796
Total	**53.1610**	**1.3688**	**118.7403**	**6.2900e-003**		**0.6602**	**0.6602**		**0.6602**	**0.6602**	**0.0000**	**214.3731**	**214.3731**	**0.2043**	**0.0000**	**219.4796**

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

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dana Reserve Residential

San Luis Obispo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	55.20	Acre	55.20	2,404,512.00	0
Apartments Low Rise	610.00	Dwelling Unit	23.50	610,000.00	1745
Single Family Housing	833.00	Dwelling Unit	149.50	1,499,400.00	2382

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2031
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	118.62	**CH4 Intensity (lb/MWhr)**	0.019	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Utility Intensity Factor based on renewable portfolio standars for PG&E for the year of 2031.

Land Use - Apartment Low Rise land use also includes 152 accessory dwelling units (ADU's) as per the traffic report. Lot acreage based on specific plan, other non-asphalt surfaces is included to account for grading of entire project.

Construction Phase - Construction phasing is based on the anticipated building schedule for Dana Reserve.

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Trips and VMT - defualts

Demolition - No structures are currently on the project site.

Grading - Defualts

Architectural Coating -

Vehicle Trips - Trip gen for Weekday and sunday is based on traffic report, sat was left default. Trip length was also left as default. Trip type was based on traffic report.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Use low VOC paint (50g/L)

Construction Off-road Equipment Mitigation - Soil stabilizers, Water exposed areas, and use tier 3 engines.

Mobile Land Use Mitigation - 75 units will be "affordable"

Area Mitigation - Use Low VOC Paints

Energy Mitigation - Based on average residential solar systems production and residential usage 75% of electicity generated will be from residential solar. Use energy efficient appliances.

Water Mitigation - Install low flow fixtures and irrigation.

Waste Mitigation -

Fleet Mix - Based on SJVAPCD Residential fleet mix for year 2031.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaCoating	Area_Parking	170407	0
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	300.00	108.00
tblConstructionPhase	NumDays	180.00	108.00
tblConstructionPhase	NumDays	465.00	130.00

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	4,650.00	1,805.00
tblConstructionPhase	NumDays	330.00	1,783.00
tblConstructionPhase	NumDays	330.00	220.00
tblDemolition	PhaseName	Demolition	Grubbing
tblFleetMix	HHD	5.8820e-003	0.02
tblFleetMix	HHD	5.8820e-003	0.02
tblFleetMix	HHD	5.8820e-003	0.02
tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDT1	0.06	0.23
tblFleetMix	LDT1	0.06	0.23
tblFleetMix	LDT1	0.06	0.23
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD2	7.5650e-003	1.0000e-003
tblFleetMix	LHD2	7.5650e-003	1.0000e-003
tblFleetMix	LHD2	7.5650e-003	1.0000e-003
tblFleetMix	MCY	0.03	2.6000e-003
tblFleetMix	MCY	0.03	2.6000e-003
tblFleetMix	MCY	0.03	2.6000e-003
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MH	4.5540e-003	3.1000e-003

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	MH	4.5540e-003	3.1000e-003
tblFleetMix	MH	4.5540e-003	3.1000e-003
tblFleetMix	MHD	8.3110e-003	7.4000e-003
tblFleetMix	MHD	8.3110e-003	7.4000e-003
tblFleetMix	MHD	8.3110e-003	7.4000e-003
tblFleetMix	OBUS	8.7600e-004	0.00
tblFleetMix	OBUS	8.7600e-004	0.00
tblFleetMix	OBUS	8.7600e-004	0.00
tblFleetMix	SBUS	7.6800e-004	1.2000e-003
tblFleetMix	SBUS	7.6800e-004	1.2000e-003
tblFleetMix	SBUS	7.6800e-004	1.2000e-003
tblFleetMix	UBUS	3.4400e-004	4.4000e-003
tblFleetMix	UBUS	3.4400e-004	4.4000e-003
tblFleetMix	UBUS	3.4400e-004	4.4000e-003
tblLandUse	LotAcreage	38.13	23.50
tblLandUse	LotAcreage	270.45	149.50
tblOffRoadEquipment	PhaseName	Demolition	Grubbing
tblOffRoadEquipment	PhaseName	Demolition	Grubbing
tblOffRoadEquipment	PhaseName	Demolition	Grubbing
tblOnRoadDust	PhaseName	Demolition	Grubbing
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.019
tblProjectCharacteristics	CO2IntensityFactor	203.98	118.62
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.002
tblTripsAndVMT	PhaseName	Demolition	Grubbing
tblVehicleTrips	DV_TP	11.00	6.00
tblVehicleTrips	DV_TP	11.00	6.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PR_TP	86.00	90.00

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	PR_TP	86.00	90.00
tblVehicleTrips	SU_TR	6.28	6.29
tblVehicleTrips	SU_TR	8.55	8.79
tblVehicleTrips	WD_TR	7.32	7.50
tblVehicleTrips	WD_TR	9.44	8.78

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.0436	49.0869	38.7660	0.0795	19.9833	2.2651	22.2484	10.1890	2.0942	12.2832	0.0000	7,704.4555	7,704.4555	2.2496	7.8300e-003	7,763.0311
2024	47.6498	44.7607	83.6751	0.3001	25.7971	0.9219	26.7190	6.9077	0.8711	7.7788	0.0000	31,083.7147	31,083.7147	1.3334	1.9390	31,694.8628
2025	47.1109	42.6908	79.8354	0.2927	25.7974	0.8187	26.6161	6.9079	0.7735	7.6813	0.0000	30,492.5232	30,492.5232	1.2892	1.8798	31,084.9276
2026	46.7418	41.7544	76.6599	0.2857	25.7977	0.8102	26.6079	6.9080	0.7655	7.6734	0.0000	29,913.9737	29,913.9737	1.2545	1.8257	30,489.3816
2027	46.3951	40.9088	73.9245	0.2791	25.7980	0.8012	26.5993	6.9081	0.7571	7.6652	0.0000	29,350.2906	29,350.2906	1.2242	1.7742	29,909.5921
2028	46.0533	40.1863	71.6312	0.2729	25.7983	0.7925	26.5908	6.9082	0.7489	7.6571	0.0000	28,831.1066	28,831.1066	1.1988	1.7275	29,375.8582
2029	45.7188	39.4940	69.6114	0.2672	25.7986	0.7839	26.5824	6.9083	0.7408	7.6491	0.0000	28,340.3409	28,340.3409	1.1764	1.6834	28,871.3953
2030	46.7206	41.2520	84.0910	0.2951	25.9471	0.6967	26.6438	6.9477	0.6854	7.6331	0.0000	31,007.1776	31,007.1776	0.7940	1.6475	31,517.9924
Maximum	**47.6498**	**49.0869**	**84.0910**	**0.3001**	**25.9471**	**2.2651**	**26.7190**	**10.1890**	**2.0942**	**12.2832**	**0.0000**	**31,083.7147**	**31,083.7147**	**2.2496**	**1.9390**	**31,694.8628**

Dana Reserve Residential - San Luis Obispo 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)

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					
2023	1.9708	37.4569	48.5123	0.0795	7.9925	1.8105	9.8029	4.0265	1.8103	5.8368	0.0000	7,704.4555	7,704.4555	2.2496	7.8300e-003	7,763.0311
2024	46.7308	45.6812	85.4043	0.3001	25.7971	1.2463	27.0434	6.9077	1.2319	8.1397	0.0000	31,083.7147	31,083.7147	1.3334	1.9390	31,694.8628
2025	46.3060	44.6587	81.6478	0.2927	25.7974	1.2383	27.0357	6.9079	1.2244	8.1322	0.0000	30,492.5232	30,492.5232	1.2892	1.8798	31,084.9276
2026	45.9369	43.7223	78.4723	0.2857	25.7977	1.2298	27.0275	6.9080	1.2164	8.1243	0.0000	29,913.9737	29,913.9737	1.2545	1.8257	30,489.3816
2027	45.5902	42.8767	75.7368	0.2791	25.7980	1.2208	27.0188	6.9081	1.2079	8.1160	0.0000	29,350.2906	29,350.2906	1.2242	1.7742	29,909.5921
2028	45.2484	42.1542	73.4435	0.2729	25.7983	1.2120	27.0103	6.9082	1.1998	8.1079	0.0000	28,831.1066	28,831.1066	1.1988	1.7275	29,375.8582
2029	44.9139	41.4619	71.4238	0.2672	25.7986	1.2034	27.0020	6.9083	1.1917	8.1000	0.0000	28,340.3409	28,340.3409	1.1764	1.6834	28,871.3953
2030	45.1905	52.2191	87.2886	0.2951	25.9471	1.8056	27.7526	6.9477	1.7943	8.7420	0.0000	31,007.1776	31,007.1776	0.7940	1.6475	31,517.9923
Maximum	**46.7308**	**52.2191**	**87.2886**	**0.3001**	**25.9471**	**1.8105**	**27.7526**	**6.9477**	**1.8103**	**8.7420**	**0.0000**	**31,083.7147**	**31,083.7147**	**2.2496**	**1.9390**	**31,694.8628**

	ROG	NOx	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	**2.88**	**-2.97**	**-4.11**	**0.00**	**5.97**	**-38.99**	**4.27**	**10.52**	**-46.26**	**4.12**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Dana Reserve Residential - San Luis Obispo 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	53.1610	1.3688	118.7403	6.2900e-003		0.6602	0.6602		0.6602	0.6602	0.0000	214.3731	214.3731	0.2043	0.0000	219.4796
Energy	0.8333	7.1205	3.0300	0.0455		0.5757	0.5757		0.5757	0.5757		9,090.0109	9,090.0109	0.1742	0.1667	9,144.0283
Mobile	13.1137	30.0992	163.6476	0.5325	71.2553	0.3697	71.6250	18.9702	0.3457	19.3159		57,804.1973	57,804.1973	1.7795	2.6275	58,631.6894
Total	**67.1079**	**38.5886**	**285.4179**	**0.5843**	**71.2553**	**1.6056**	**72.8609**	**18.9702**	**1.5816**	**20.5518**	**0.0000**	**67,108.5813**	**67,108.5813**	**2.1580**	**2.7942**	**67,995.1973**

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	53.1610	1.3688	118.7403	6.2900e-003		0.6602	0.6602		0.6602	0.6602	0.0000	214.3731	214.3731	0.2043	0.0000	219.4796
Energy	0.8333	7.1205	3.0300	0.0455		0.5757	0.5757		0.5757	0.5757		9,090.0109	9,090.0109	0.1742	0.1667	9,144.0283
Mobile	12.7537	26.8410	147.8850	0.4521	60.1201	0.3180	60.4381	16.0057	0.2972	16.3030		49,077.8032	49,077.8032	1.6714	2.3270	49,813.0245
Total	**66.7479**	**35.3303**	**269.6553**	**0.5039**	**60.1201**	**1.5539**	**61.6740**	**16.0057**	**1.5332**	**17.5389**	**0.0000**	**58,382.1871**	**58,382.1871**	**2.0499**	**2.4936**	**59,176.5324**

Dana Reserve Residential - San Luis Obispo 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	**0.54**	**8.44**	**5.52**	**13.76**	**15.63**	**3.22**	**15.35**	**15.63**	**3.06**	**14.66**	**0.00**	**13.00**	**13.00**	**5.01**	**10.76**	**12.97**

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	1/2/2023	5/31/2023	5	108	
2	Site Preparation	Site Preparation	2/1/2023	6/30/2023	5	108	
3	Grading	Grading	7/3/2023	12/29/2023	5	130	
4	Building Construction	Building Construction	1/1/2024	11/29/2030	5	1805	
5	Architectural Coating	Architectural Coating	3/1/2024	12/31/2030	5	1783	
6	Paving	Paving	2/1/2030	12/5/2030	5	220	

Acres of Grading (Site Preparation Phase): 162

Acres of Grading (Grading Phase): 390

Acres of Paving: 55.2

Residential Indoor: 4,271,535; Residential Outdoor: 1,423,845; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 170,407 (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	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,932.00	620.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	386.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grubbing - 2023

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	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**		**0.9975**	**0.9975**		**0.9280**	**0.9280**		**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

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	0.0523	0.0356	0.3993	1.2000e-003	0.1483	7.1000e-004	0.1490	0.0393	6.6000e-004	0.0400		122.8016	122.8016	3.5100e-003	3.5600e-003	123.9505
Total	**0.0523**	**0.0356**	**0.3993**	**1.2000e-003**	**0.1483**	**7.1000e-004**	**0.1490**	**0.0393**	**6.6000e-004**	**0.0400**		**122.8016**	**122.8016**	**3.5100e-003**	**3.5600e-003**	**123.9505**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grubbing - 2023

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	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**0.9246**	**18.3130**	**24.6739**	**0.0388**		**0.8627**	**0.8627**		**0.8627**	**0.8627**	**0.0000**	**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

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	0.0523	0.0356	0.3993	1.2000e-003	0.1483	7.1000e-004	0.1490	0.0393	6.6000e-004	0.0400		122.8016	122.8016	3.5100e-003	3.5600e-003	123.9505
Total	**0.0523**	**0.0356**	**0.3993**	**1.2000e-003**	**0.1483**	**7.1000e-004**	**0.1490**	**0.0393**	**6.6000e-004**	**0.0400**		**122.8016**	**122.8016**	**3.5100e-003**	**3.5600e-003**	**123.9505**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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	0.0628	0.0427	0.4791	1.4400e-003	0.1780	8.5000e-004	0.1788	0.0472	7.9000e-004	0.0480		147.3619	147.3619	4.2100e-003	4.2700e-003	148.7406
Total	**0.0628**	**0.0427**	**0.4791**	**1.4400e-003**	**0.1780**	**8.5000e-004**	**0.1788**	**0.0472**	**7.9000e-004**	**0.0480**		**147.3619**	**147.3619**	**4.2100e-003**	**4.2700e-003**	**148.7406**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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	0.9312	19.0656	22.9600	0.0381		0.9462	0.9462		0.9462	0.9462	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**0.9312**	**19.0656**	**22.9600**	**0.0381**	**7.6662**	**0.9462**	**8.6124**	**3.9400**	**0.9462**	**4.8861**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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	0.0628	0.0427	0.4791	1.4400e-003	0.1780	8.5000e-004	0.1788	0.0472	7.9000e-004	0.0480		147.3619	147.3619	4.2100e-003	4.2700e-003	148.7406
Total	**0.0628**	**0.0427**	**0.4791**	**1.4400e-003**	**0.1780**	**8.5000e-004**	**0.1788**	**0.0472**	**7.9000e-004**	**0.0480**		**147.3619**	**147.3619**	**4.2100e-003**	**4.2700e-003**	**148.7406**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**9.2036**	**1.4245**	**10.6281**	**3.6538**	**1.3105**	**4.9643**		**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

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	0.0698	0.0475	0.5323	1.6000e-003	0.1977	9.5000e-004	0.1987	0.0524	8.7000e-004	0.0533		163.7354	163.7354	4.6800e-003	4.7500e-003	165.2673
Total	**0.0698**	**0.0475**	**0.5323**	**1.6000e-003**	**0.1977**	**9.5000e-004**	**0.1987**	**0.0524**	**8.7000e-004**	**0.0533**		**163.7354**	**163.7354**	**4.6800e-003**	**4.7500e-003**	**165.2673**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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	1.5231	29.9782	36.7226	0.0621		1.2994	1.2994		1.2994	1.2994	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**1.5231**	**29.9782**	**36.7226**	**0.0621**	**3.5894**	**1.2994**	**4.8888**	**1.4250**	**1.2994**	**2.7244**	**0.0000**	**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

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	0.0698	0.0475	0.5323	1.6000e-003	0.1977	9.5000e-004	0.1987	0.0524	8.7000e-004	0.0533		163.7354	163.7354	4.6800e-003	4.7500e-003	165.2673
Total	**0.0698**	**0.0475**	**0.5323**	**1.6000e-003**	**0.1977**	**9.5000e-004**	**0.1987**	**0.0524**	**8.7000e-004**	**0.0533**		**163.7354**	**163.7354**	**4.6800e-003**	**4.7500e-003**	**165.2673**

Dana Reserve Residential - San Luis Obispo 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	0.6934	25.1943	8.2149	0.0906	2.8811	0.1433	3.0243	0.8299	0.1370	0.9670		9,718.3223	9,718.3223	0.2206	1.4274	10,149.2048
Worker	6.3561	4.0873	47.9110	0.1497	19.1000	0.0870	19.1870	5.0657	0.0802	5.1459		15,442.8690	15,442.8690	0.4105	0.4264	15,580.1932
Total	**7.0495**	**29.2815**	**56.1259**	**0.2403**	**21.9811**	**0.2303**	**22.2114**	**5.8956**	**0.2172**	**6.1129**		**25,161.1913**	**25,161.1913**	**0.6312**	**1.8538**	**25,729.3979**

Dana Reserve Residential - San Luis Obispo 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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.6934	25.1943	8.2149	0.0906	2.8811	0.1433	3.0243	0.8299	0.1370	0.9670		9,718.3223	9,718.3223	0.2206	1.4274	10,149.2048
Worker	6.3561	4.0873	47.9110	0.1497	19.1000	0.0870	19.1870	5.0657	0.0802	5.1459		15,442.8690	15,442.8690	0.4105	0.4264	15,580.1932
Total	**7.0495**	**29.2815**	**56.1259**	**0.2403**	**21.9811**	**0.2303**	**22.2114**	**5.8956**	**0.2172**	**6.1129**		**25,161.1913**	**25,161.1913**	**0.6312**	**1.8538**	**25,729.3979**

Dana Reserve Residential - San Luis Obispo 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	0.6697	24.6698	8.0905	0.0890	2.8814	0.1399	3.0213	0.8301	0.1338	0.9639		9,550.4770	9,550.4770	0.2240	1.4017	9,973.7712
Worker	6.0217	3.6722	44.8837	0.1448	19.1000	0.0832	19.1832	5.0657	0.0766	5.1423		15,089.3732	15,089.3732	0.3741	0.3985	15,217.4809
Total	**6.6915**	**28.3420**	**52.9741**	**0.2338**	**21.9814**	**0.2230**	**22.2044**	**5.8958**	**0.2104**	**6.1062**		**24,639.8502**	**24,639.8502**	**0.5982**	**1.8002**	**25,191.2521**

Dana Reserve Residential - San Luis Obispo 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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.6697	24.6698	8.0905	0.0890	2.8814	0.1399	3.0213	0.8301	0.1338	0.9639		9,550.4770	9,550.4770	0.2240	1.4017	9,973.7712
Worker	6.0217	3.6722	44.8837	0.1448	19.1000	0.0832	19.1832	5.0657	0.0766	5.1423		15,089.3732	15,089.3732	0.3741	0.3985	15,217.4809
Total	**6.6915**	**28.3420**	**52.9741**	**0.2338**	**21.9814**	**0.2230**	**22.2044**	**5.8958**	**0.2104**	**6.1062**		**24,639.8502**	**24,639.8502**	**0.5982**	**1.8002**	**25,191.2521**

Dana Reserve Residential - San Luis Obispo 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	0.6482	24.1456	7.9953	0.0873	2.8817	0.1361	3.0178	0.8302	0.1302	0.9604		9,379.6974	9,379.6974	0.2273	1.3755	9,795.2865
Worker	5.7321	3.3286	42.3163	0.1404	19.1000	0.0792	19.1792	5.0657	0.0729	5.1386		14,749.5063	14,749.5063	0.3424	0.3752	14,869.8698
Total	**6.3803**	**27.4742**	**50.3116**	**0.2277**	**21.9817**	**0.2153**	**22.1970**	**5.8959**	**0.2032**	**6.0990**		**24,129.2037**	**24,129.2037**	**0.5698**	**1.7507**	**24,665.1563**

Dana Reserve Residential - San Luis Obispo 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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.6482	24.1456	7.9953	0.0873	2.8817	0.1361	3.0178	0.8302	0.1302	0.9604		9,379.6974	9,379.6974	0.2273	1.3755	9,795.2865
Worker	5.7321	3.3286	42.3163	0.1404	19.1000	0.0792	19.1792	5.0657	0.0729	5.1386		14,749.5063	14,749.5063	0.3424	0.3752	14,869.8698
Total	**6.3803**	**27.4742**	**50.3116**	**0.2277**	**21.9817**	**0.2153**	**22.1970**	**5.8959**	**0.2032**	**6.0990**		**24,129.2037**	**24,129.2037**	**0.5698**	**1.7507**	**24,665.1563**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2027

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	0.6293	23.6502	7.9181	0.0855	2.8820	0.1326	3.0146	0.8303	0.1268	0.9571		9,195.3719	9,195.3719	0.2302	1.3478	9,602.7625
Worker	5.4589	3.0367	40.1007	0.1364	19.1000	0.0747	19.1747	5.0657	0.0688	5.1345		14,433.3205	14,433.3205	0.3148	0.3554	14,547.0929
Total	**6.0882**	**26.6869**	**48.0188**	**0.2219**	**21.9820**	**0.2072**	**22.1892**	**5.8960**	**0.1956**	**6.0916**		**23,628.6924**	**23,628.6924**	**0.5450**	**1.7032**	**24,149.8554**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2027

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.6293	23.6502	7.9181	0.0855	2.8820	0.1326	3.0146	0.8303	0.1268	0.9571		9,195.3719	9,195.3719	0.2302	1.3478	9,602.7625
Worker	5.4589	3.0367	40.1007	0.1364	19.1000	0.0747	19.1747	5.0657	0.0688	5.1345		14,433.3205	14,433.3205	0.3148	0.3554	14,547.0929
Total	**6.0882**	**26.6869**	**48.0188**	**0.2219**	**21.9820**	**0.2072**	**22.1892**	**5.8960**	**0.1956**	**6.0916**		**23,628.6924**	**23,628.6924**	**0.5450**	**1.7032**	**24,149.8554**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2028

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	0.6121	23.2225	7.8607	0.0838	2.8823	0.1294	3.0116	0.8304	0.1237	0.9541		9,019.3663	9,019.3663	0.2338	1.3212	9,418.9116
Worker	5.1883	2.7910	38.2372	0.1327	19.1000	0.0701	19.1701	5.0657	0.0645	5.1302		14,147.2891	14,147.2891	0.2907	0.3387	14,255.4734
Total	**5.8004**	**26.0135**	**46.0978**	**0.2165**	**21.9823**	**0.1994**	**22.1817**	**5.8961**	**0.1882**	**6.0843**		**23,166.6554**	**23,166.6554**	**0.5244**	**1.6598**	**23,674.3851**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2028

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.6121	23.2225	7.8607	0.0838	2.8823	0.1294	3.0116	0.8304	0.1237	0.9541		9,019.3663	9,019.3663	0.2338	1.3212	9,418.9116
Worker	5.1883	2.7910	38.2372	0.1327	19.1000	0.0701	19.1701	5.0657	0.0645	5.1302		14,147.2891	14,147.2891	0.2907	0.3387	14,255.4734
Total	**5.8004**	**26.0135**	**46.0978**	**0.2165**	**21.9823**	**0.1994**	**22.1817**	**5.8961**	**0.1882**	**6.0843**		**23,166.6554**	**23,166.6554**	**0.5244**	**1.6598**	**23,674.3851**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2029

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	0.5956	22.7821	7.8079	0.0821	2.8825	0.1260	3.0085	0.8305	0.1205	0.9510		8,840.6893	8,840.6893	0.2371	1.2942	9,232.2793
Worker	4.9232	2.5811	36.5977	0.1293	19.1000	0.0657	19.1657	5.0657	0.0605	5.1262		13,887.1704	13,887.1704	0.2692	0.3244	13,990.5689
Total	**5.5189**	**25.3632**	**44.4056**	**0.2114**	**21.9825**	**0.1917**	**22.1742**	**5.8962**	**0.1810**	**6.0771**		**22,727.8597**	**22,727.8597**	**0.5063**	**1.6186**	**23,222.8482**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2029

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.5956	22.7821	7.8079	0.0821	2.8825	0.1260	3.0085	0.8305	0.1205	0.9510		8,840.6893	8,840.6893	0.2371	1.2942	9,232.2793
Worker	4.9232	2.5811	36.5977	0.1293	19.1000	0.0657	19.1657	5.0657	0.0605	5.1262		13,887.1704	13,887.1704	0.2692	0.3244	13,990.5689
Total	**5.5189**	**25.3632**	**44.4056**	**0.2114**	**21.9825**	**0.1917**	**22.1742**	**5.8962**	**0.1810**	**6.0771**		**22,727.8597**	**22,727.8597**	**0.5063**	**1.6186**	**23,222.8482**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2030

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	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**		**2,897.5468**	**2,897.5468**	**0.1162**		**2,900.4529**

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	0.5823	22.4415	7.7777	0.0806	2.8827	0.1233	3.0060	0.8306	0.1179	0.9485		8,682.3667	8,682.3667	0.2399	1.2705	9,066.9678
Worker	4.6672	2.4010	35.2026	0.1263	19.1000	0.0615	19.1615	5.0657	0.0566	5.1223		13,655.0906	13,655.0906	0.2500	0.3123	13,754.3897
Total	**5.2495**	**24.8425**	**42.9802**	**0.2069**	**21.9827**	**0.1848**	**22.1676**	**5.8963**	**0.1746**	**6.0708**		**22,337.4573**	**22,337.4573**	**0.4899**	**1.5827**	**22,821.3575**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2030

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	0.6739	14.2261	17.8738	0.0310		0.9036	0.9036		0.9036	0.9036	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	**0.6739**	**14.2261**	**17.8738**	**0.0310**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,897.5468**	**2,897.5468**	**0.1162**		**2,900.4529**

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	0.5823	22.4415	7.7777	0.0806	2.8827	0.1233	3.0060	0.8306	0.1179	0.9485		8,682.3667	8,682.3667	0.2399	1.2705	9,066.9678
Worker	4.6672	2.4010	35.2026	0.1263	19.1000	0.0615	19.1615	5.0657	0.0566	5.1223		13,655.0906	13,655.0906	0.2500	0.3123	13,754.3897
Total	**5.2495**	**24.8425**	**42.9802**	**0.2069**	**21.9827**	**0.1848**	**22.1676**	**5.8963**	**0.1746**	**6.0708**		**22,337.4573**	**22,337.4573**	**0.4899**	**1.5827**	**22,821.3575**

Dana Reserve Residential - San Luis Obispo 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	37.6781					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	**37.8588**	**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	1.2699	0.8166	9.5723	0.0299	3.8161	0.0174	3.8334	1.0121	0.0160	1.0281		3,085.3765	3,085.3765	0.0820	0.0852	3,112.8129
Total	**1.2699**	**0.8166**	**9.5723**	**0.0299**	**3.8161**	**0.0174**	**3.8334**	**1.0121**	**0.0160**	**1.0281**		**3,085.3765**	**3,085.3765**	**0.0820**	**0.0852**	**3,112.8129**

Dana Reserve Residential - San Luis Obispo 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	37.6781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**37.7375**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	1.2699	0.8166	9.5723	0.0299	3.8161	0.0174	3.8334	1.0121	0.0160	1.0281		3,085.3765	3,085.3765	0.0820	0.0852	3,112.8129
Total	**1.2699**	**0.8166**	**9.5723**	**0.0299**	**3.8161**	**0.0174**	**3.8334**	**1.0121**	**0.0160**	**1.0281**		**3,085.3765**	**3,085.3765**	**0.0820**	**0.0852**	**3,112.8129**

Dana Reserve Residential - San Luis Obispo 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	37.6781					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	**37.8489**	**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	1.2031	0.7337	8.9674	0.0289	3.8161	0.0166	3.8327	1.0121	0.0153	1.0274		3,014.7505	3,014.7505	0.0748	0.0796	3,040.3456
Total	**1.2031**	**0.7337**	**8.9674**	**0.0289**	**3.8161**	**0.0166**	**3.8327**	**1.0121**	**0.0153**	**1.0274**		**3,014.7505**	**3,014.7505**	**0.0748**	**0.0796**	**3,040.3456**

Dana Reserve Residential - San Luis Obispo 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	37.6781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**37.7375**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	1.2031	0.7337	8.9674	0.0289	3.8161	0.0166	3.8327	1.0121	0.0153	1.0274		3,014.7505	3,014.7505	0.0748	0.0796	3,040.3456
Total	**1.2031**	**0.7337**	**8.9674**	**0.0289**	**3.8161**	**0.0166**	**3.8327**	**1.0121**	**0.0153**	**1.0274**		**3,014.7505**	**3,014.7505**	**0.0748**	**0.0796**	**3,040.3456**

Dana Reserve Residential - San Luis Obispo 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	37.6781					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	**37.8489**	**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	1.1452	0.6650	8.4545	0.0281	3.8161	0.0158	3.8319	1.0121	0.0146	1.0267		2,946.8475	2,946.8475	0.0684	0.0750	2,970.8953
Total	**1.1452**	**0.6650**	**8.4545**	**0.0281**	**3.8161**	**0.0158**	**3.8319**	**1.0121**	**0.0146**	**1.0267**		**2,946.8475**	**2,946.8475**	**0.0684**	**0.0750**	**2,970.8953**

Dana Reserve Residential - San Luis Obispo 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

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	37.6781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**37.7375**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	1.1452	0.6650	8.4545	0.0281	3.8161	0.0158	3.8319	1.0121	0.0146	1.0267		2,946.8475	2,946.8475	0.0684	0.0750	2,970.8953
Total	**1.1452**	**0.6650**	**8.4545**	**0.0281**	**3.8161**	**0.0158**	**3.8319**	**1.0121**	**0.0146**	**1.0267**		**2,946.8475**	**2,946.8475**	**0.0684**	**0.0750**	**2,970.8953**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2027

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	37.6781					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	**37.8489**	**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	1.0906	0.6067	8.0118	0.0272	3.8161	0.0149	3.8310	1.0121	0.0137	1.0258		2,883.6758	2,883.6758	0.0629	0.0710	2,906.4068
Total	**1.0906**	**0.6067**	**8.0118**	**0.0272**	**3.8161**	**0.0149**	**3.8310**	**1.0121**	**0.0137**	**1.0258**		**2,883.6758**	**2,883.6758**	**0.0629**	**0.0710**	**2,906.4068**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2027

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	37.6781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**37.7375**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	1.0906	0.6067	8.0118	0.0272	3.8161	0.0149	3.8310	1.0121	0.0137	1.0258		2,883.6758	2,883.6758	0.0629	0.0710	2,906.4068
Total	**1.0906**	**0.6067**	**8.0118**	**0.0272**	**3.8161**	**0.0149**	**3.8310**	**1.0121**	**0.0137**	**1.0258**		**2,883.6758**	**2,883.6758**	**0.0629**	**0.0710**	**2,906.4068**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

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	37.6781					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	**37.8489**	**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	1.0366	0.5576	7.6395	0.0265	3.8161	0.0140	3.8300	1.0121	0.0129	1.0250		2,826.5288	2,826.5288	0.0581	0.0677	2,848.1432
Total	**1.0366**	**0.5576**	**7.6395**	**0.0265**	**3.8161**	**0.0140**	**3.8300**	**1.0121**	**0.0129**	**1.0250**		**2,826.5288**	**2,826.5288**	**0.0581**	**0.0677**	**2,848.1432**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

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	37.6781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**37.7375**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	1.0366	0.5576	7.6395	0.0265	3.8161	0.0140	3.8300	1.0121	0.0129	1.0250		2,826.5288	2,826.5288	0.0581	0.0677	2,848.1432
Total	**1.0366**	**0.5576**	**7.6395**	**0.0265**	**3.8161**	**0.0140**	**3.8300**	**1.0121**	**0.0129**	**1.0250**		**2,826.5288**	**2,826.5288**	**0.0581**	**0.0677**	**2,848.1432**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

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	37.6781					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	**37.8489**	**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	0.9836	0.5157	7.3120	0.0258	3.8161	0.0131	3.8292	1.0121	0.0121	1.0242		2,774.5589	2,774.5589	0.0538	0.0648	2,795.2172
Total	**0.9836**	**0.5157**	**7.3120**	**0.0258**	**3.8161**	**0.0131**	**3.8292**	**1.0121**	**0.0121**	**1.0242**		**2,774.5589**	**2,774.5589**	**0.0538**	**0.0648**	**2,795.2172**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

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	37.6781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**37.7375**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	0.9836	0.5157	7.3120	0.0258	3.8161	0.0131	3.8292	1.0121	0.0121	1.0242		2,774.5589	2,774.5589	0.0538	0.0648	2,795.2172
Total	**0.9836**	**0.5157**	**7.3120**	**0.0258**	**3.8161**	**0.0131**	**3.8292**	**1.0121**	**0.0121**	**1.0242**		**2,774.5589**	**2,774.5589**	**0.0538**	**0.0648**	**2,795.2172**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2030

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	37.6781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	**37.8088**	**0.8563**	**1.7977**	**2.9700e-003**		**0.0203**	**0.0203**		**0.0203**	**0.0203**		**281.4481**	**281.4481**	**0.0114**		**281.7328**

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	0.9325	0.4797	7.0332	0.0252	3.8161	0.0123	3.8283	1.0121	0.0113	1.0234		2,728.1910	2,728.1910	0.0500	0.0624	2,748.0302
Total	**0.9325**	**0.4797**	**7.0332**	**0.0252**	**3.8161**	**0.0123**	**3.8283**	**1.0121**	**0.0113**	**1.0234**		**2,728.1910**	**2,728.1910**	**0.0500**	**0.0624**	**2,748.0302**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2030

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	37.6781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0114		281.7328
Total	**37.7375**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0114**		**281.7328**

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	0.9325	0.4797	7.0332	0.0252	3.8161	0.0123	3.8283	1.0121	0.0113	1.0234		2,728.1910	2,728.1910	0.0500	0.0624	2,748.0302
Total	**0.9325**	**0.4797**	**7.0332**	**0.0252**	**3.8161**	**0.0123**	**3.8283**	**1.0121**	**0.0113**	**1.0234**		**2,728.1910**	**2,728.1910**	**0.0500**	**0.0624**	**2,748.0302**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2030

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	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.5168	2,656.5168	0.1245		2,659.6302
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3845**	**7.1202**	**15.8495**	**0.0281**		**0.3306**	**0.3306**		**0.3306**	**0.3306**		**2,656.5168**	**2,656.5168**	**0.1245**		**2,659.6302**

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	0.0362	0.0186	0.2733	9.8000e-004	0.1483	4.8000e-004	0.1488	0.0393	4.4000e-004	0.0398		106.0178	106.0178	1.9400e-003	2.4200e-003	106.7887
Total	**0.0362**	**0.0186**	**0.2733**	**9.8000e-004**	**0.1483**	**4.8000e-004**	**0.1488**	**0.0393**	**4.4000e-004**	**0.0398**		**106.0178**	**106.0178**	**1.9400e-003**	**2.4200e-003**	**106.7887**

Dana Reserve Residential - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2030

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	0.5609	11.2952	17.2957	0.0281		0.6093	0.6093		0.6093	0.6093	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5609**	**11.2952**	**17.2957**	**0.0281**		**0.6093**	**0.6093**		**0.6093**	**0.6093**	**0.0000**	**2,656.5168**	**2,656.5168**	**0.1245**		**2,659.6302**

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	0.0362	0.0186	0.2733	9.8000e-004	0.1483	4.8000e-004	0.1488	0.0393	4.4000e-004	0.0398		106.0178	106.0178	1.9400e-003	2.4200e-003	106.7887
Total	**0.0362**	**0.0186**	**0.2733**	**9.8000e-004**	**0.1483**	**4.8000e-004**	**0.1488**	**0.0393**	**4.4000e-004**	**0.0398**		**106.0178**	**106.0178**	**1.9400e-003**	**2.4200e-003**	**106.7887**

Dana Reserve Residential - San Luis Obispo County, Winter

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 Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Integrate Below Market Rate Housing

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	12.7537	26.8410	147.8850	0.4521	60.1201	0.3180	60.4381	16.0057	0.2972	16.3030		49,077.8032	49,077.8032	1.6714	2.3270	49,813.0245
Unmitigated	13.1137	30.0992	163.6476	0.5325	71.2553	0.3697	71.6250	18.9702	0.3457	19.3159		57,804.1973	57,804.1973	1.7795	2.6275	58,631.6894

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	4,575.00	4,965.40	3836.90	11,859,256	10,005,989
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	7,313.74	7,946.82	7322.07	19,406,808	16,374,071
Total	11,888.74	12,912.22	11,158.97	31,266,064	26,380,060

4.3 Trip Type Information

Dana Reserve Residential - San Luis Obispo County, Winter

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	90	6	4
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	90	6	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.507600	0.225400	0.169300	0.059800	0.000800	0.001000	0.007400	0.017400	0.000000	0.004400	0.002600	0.001200	0.003100
Other Asphalt Surfaces	0.507600	0.225400	0.169300	0.059800	0.000800	0.001000	0.007400	0.017400	0.000000	0.004400	0.002600	0.001200	0.003100
Single Family Housing	0.507600	0.225400	0.169300	0.059800	0.000800	0.001000	0.007400	0.017400	0.000000	0.004400	0.002600	0.001200	0.003100

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

Dana Reserve Residential - San Luis Obispo 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	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.8333	7.1205	3.0300	0.0455		0.5757	0.5757		0.5757	0.5757		9,090.0109	9,090.0109	0.1742	0.1667	9,144.0283
NaturalGas Unmitigated	0.8333	7.1205	3.0300	0.0455		0.5757	0.5757		0.5757	0.5757		9,090.0109	9,090.0109	0.1742	0.1667	9,144.0283

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	16491.4	0.1779	1.5198	0.6467	9.7000e-003		0.1229	0.1229		0.1229	0.1229		1,940.1618	1,940.1618	0.0372	0.0356	1,951.6912
Single Family Housing	60773.7	0.6554	5.6007	2.3833	0.0358		0.4528	0.4528		0.4528	0.4528		7,149.8491	7,149.8491	0.1370	0.1311	7,192.3371
Total		**0.8333**	**7.1205**	**3.0300**	**0.0455**		**0.5757**	**0.5757**		**0.5757**	**0.5757**		**9,090.0109**	**9,090.0109**	**0.1742**	**0.1667**	**9,144.0283**

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	lb/day										lb/day					
Apartments Low Rise	16.4914	0.1779	1.5198	0.6467	9.7000e-003		0.1229	0.1229		0.1229	0.1229		1,940.1618	1,940.1618	0.0372	0.0356	1,951.6912
Single Family Housing	60.7737	0.6554	5.6007	2.3833	0.0358		0.4528	0.4528		0.4528	0.4528		7,149.8491	7,149.8491	0.1370	0.1311	7,192.3371
Total		**0.8333**	**7.1205**	**3.0300**	**0.0455**		**0.5757**	**0.5757**		**0.5757**	**0.5757**		**9,090.0109**	**9,090.0109**	**0.1742**	**0.1667**	**9,144.0283**

6.0 Area Detail

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

Dana Reserve Residential - San Luis Obispo 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	53.1610	1.3688	118.7403	6.2900e-003		0.6602	0.6602		0.6602	0.6602	0.0000	214.3731	214.3731	0.2043	0.0000	219.4796
Unmitigated	53.1610	1.3688	118.7403	6.2900e-003		0.6602	0.6602		0.6602	0.6602	0.0000	214.3731	214.3731	0.2043	0.0000	219.4796

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	3.6162					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	45.9928					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	3.5520	1.3688	118.7403	6.2900e-003		0.6602	0.6602		0.6602	0.6602		214.3731	214.3731	0.2043		219.4796
Total	**53.1610**	**1.3688**	**118.7403**	**6.2900e-003**		**0.6602**	**0.6602**		**0.6602**	**0.6602**	**0.0000**	**214.3731**	**214.3731**	**0.2043**	**0.0000**	**219.4796**

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	3.6162					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	45.9928					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	3.5520	1.3688	118.7403	6.2900e-003		0.6602	0.6602		0.6602	0.6602		214.3731	214.3731	0.2043		219.4796
Total	**53.1610**	**1.3688**	**118.7403**	**6.2900e-003**		**0.6602**	**0.6602**		**0.6602**	**0.6602**	**0.0000**	**214.3731**	**214.3731**	**0.2043**	**0.0000**	**219.4796**

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

Dana Reserve Commercial and Educational - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dana Reserve Commercial and Educational

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	90.00	1000sqft	17.21	90,000.00	0
Junior College (2yr)	30.00	1000sqft	0.69	30,000.00	0
Parking Lot	572.00	Space	5.15	228,800.00	0
Regional Shopping Center	23.00	1000sqft	4.40	23,000.00	0
Other Asphalt Surfaces	24.08	Acre	24.08	1,048,924.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
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 - Contruction of commercial and educational will be completed on 2029. Utility intensity factor based on renewable portfolio standard for PG&E for 2030 operational year.

Land Use - Parking lot spaces are based on development standard which state 1sp/250 sqft of commercial space. Lot Acreage based on SP. Other Asphalt Surface used for residential roads

Construction Phase - Grubbing, site prep, and grading will take place with residential construction.

Off-road Equipment - Default

Off-road Equipment - Default

Off-road Equipment - Default

Dana Reserve Commercial and Educational - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Trips - Trip gen for weekday and sunday is based on traffic report, used defualts for saturday. Office park and retail are lumped in traffic report so their trip gens are split proportionally based on square footage. Trip Type is based on traffic report.

Area Coating - Use low VOC paint.

Construction Off-road Equipment Mitigation - Tier 3 engines, soil stabilizers, water exposed areas 3 times a day, and enforce vehicle speed on unpaved roads of 15 miles per hour.

Mobile Land Use Mitigation -

Area Mitigation - Use low VOC paints

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	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	3.00
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	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	35.00	1,500.00
tblConstructionPhase	NumDays	440.00	1,540.00
tblConstructionPhase	PhaseEndDate	12/12/2025	12/28/2029
tblConstructionPhase	PhaseEndDate	9/5/2025	11/23/2029
tblConstructionPhase	PhaseEndDate	10/24/2025	12/19/2029
tblConstructionPhase	PhaseStartDate	10/25/2025	4/1/2024
tblConstructionPhase	PhaseStartDate	9/6/2025	11/1/2029
tblLandUse	LotAcreage	2.07	17.21
tblLandUse	LotAcreage	0.53	4.40
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.021
tblProjectCharacteristics	CO2IntensityFactor	203.98	127.09
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.002
tblVehicleTrips	DV_TP	7.00	6.00
tblVehicleTrips	DV_TP	15.00	6.00
tblVehicleTrips	DV_TP	35.00	6.00
tblVehicleTrips	PB_TP	1.00	4.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PB_TP	11.00	4.00
tblVehicleTrips	PR_TP	92.00	90.00
tblVehicleTrips	PR_TP	82.00	90.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	SU_TR	1.21	1.20

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	SU_TR	0.76	25.19
tblVehicleTrips	SU_TR	21.10	5.09
tblVehicleTrips	WD_TR	20.25	20.27
tblVehicleTrips	WD_TR	11.07	69.02
tblVehicleTrips	WD_TR	37.75	13.96

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.5091	2.2503	2.9387	6.7000e-003	0.2467	0.0892	0.3359	0.0664	0.0842	0.1507	0.0000	601.9780	601.9780	0.0799	0.0210	610.2279
2025	0.5705	2.1348	2.9612	6.7600e-003	0.2548	0.0783	0.3331	0.0686	0.0741	0.1427	0.0000	609.1389	609.1389	0.0795	0.0205	617.2317
2026	0.5670	2.1240	2.9298	6.6900e-003	0.2548	0.0782	0.3331	0.0686	0.0740	0.1426	0.0000	603.4957	603.4957	0.0792	0.0199	611.4173
2027	0.5638	2.1142	2.9028	6.6200e-003	0.2548	0.0781	0.3330	0.0686	0.0739	0.1425	0.0000	597.9502	597.9502	0.0789	0.0194	605.7070
2028	0.5585	2.0977	2.8692	6.5300e-003	0.2538	0.0778	0.3316	0.0683	0.0735	0.1418	0.0000	590.5552	590.5552	0.0784	0.0189	598.1328
2029	0.5883	2.0540	2.8649	6.3200e-003	0.2355	0.0782	0.3136	0.0633	0.0738	0.1371	0.0000	571.7110	571.7110	0.0823	0.0167	578.7487
Maximum	**0.5883**	**2.2503**	**2.9612**	**6.7600e-003**	**0.2548**	**0.0892**	**0.3359**	**0.0686**	**0.0842**	**0.1507**	**0.0000**	**609.1389**	**609.1389**	**0.0823**	**0.0210**	**617.2317**

Dana Reserve Commercial and Educational - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

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	0.3926	2.3664	3.1645	6.7000e-003	0.2467	0.1306	0.3773	0.0664	0.1304	0.1968	0.0000	601.9776	601.9776	0.0799	0.0210	610.2275
2025	0.4655	2.3916	3.1977	6.7600e-003	0.2548	0.1331	0.3879	0.0686	0.1329	0.2015	0.0000	609.1385	609.1385	0.0795	0.0205	617.2313
2026	0.4620	2.3808	3.1663	6.6900e-003	0.2548	0.1330	0.3878	0.0686	0.1329	0.2014	0.0000	603.4953	603.4953	0.0792	0.0199	611.4169
2027	0.4588	2.3710	3.1393	6.6200e-003	0.2548	0.1329	0.3877	0.0686	0.1328	0.2013	0.0000	597.9498	597.9498	0.0789	0.0194	605.7066
2028	0.4538	2.3535	3.1048	6.5300e-003	0.2538	0.1323	0.3861	0.0683	0.1322	0.2005	0.0000	590.5548	590.5548	0.0784	0.0189	598.1324
2029	0.4861	2.3353	3.1257	6.3200e-003	0.2355	0.1314	0.3668	0.0633	0.1312	0.1946	0.0000	571.7106	571.7106	0.0823	0.0167	578.7483
Maximum	**0.4861**	**2.3916**	**3.1977**	**6.7600e-003**	**0.2548**	**0.1331**	**0.3879**	**0.0686**	**0.1329**	**0.2015**	**0.0000**	**609.1385**	**609.1385**	**0.0823**	**0.0210**	**617.2313**

	ROG	NOx	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	**19.02**	**-11.14**	**-8.20**	**0.00**	**0.00**	**-65.31**	**-15.82**	**0.00**	**-74.68**	**-39.51**	**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**	0.5930	0.5925
2	**4-1-2024**	**6-30-2024**	0.7116	0.7117
3	**7-1-2024**	**9-30-2024**	0.7195	0.7195
4	**10-1-2024**	**12-31-2024**	0.7253	0.7254
5	**1-1-2025**	**3-31-2025**	0.6683	0.7057

Dana Reserve Commercial and Educational - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6	**4-1-2025**	**6-30-2025**	0.6702	0.7080
7	**7-1-2025**	**9-30-2025**	0.6775	0.7157
8	**10-1-2025**	**12-31-2025**	0.6832	0.7214
9	**1-1-2026**	**3-31-2026**	0.6648	0.7022
10	**4-1-2026**	**6-30-2026**	0.6668	0.7045
11	**7-1-2026**	**9-30-2026**	0.6741	0.7123
12	**10-1-2026**	**12-31-2026**	0.6795	0.7178
13	**1-1-2027**	**3-31-2027**	0.6615	0.6989
14	**4-1-2027**	**6-30-2027**	0.6636	0.7014
15	**7-1-2027**	**9-30-2027**	0.6709	0.7091
16	**10-1-2027**	**12-31-2027**	0.6762	0.7144
17	**1-1-2028**	**3-31-2028**	0.6659	0.7037
18	**4-1-2028**	**6-30-2028**	0.6609	0.6986
19	**7-1-2028**	**9-30-2028**	0.6681	0.7063
20	**10-1-2028**	**12-31-2028**	0.6732	0.7115
21	**1-1-2029**	**3-31-2029**	0.6558	0.6932
22	**4-1-2029**	**6-30-2029**	0.6582	0.6959
23	**7-1-2029**	**9-30-2029**	0.6654	0.7036
		Highest	0.7253	0.7254

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	0.6769	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0242	0.0242	6.0000e-005	0.0000	0.0258
Energy	0.0143	0.1301	0.1093	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003	0.0000	270.5967	270.5967	0.0240	4.6300e-003	272.5760
Mobile	2.3584	2.7912	20.9840	0.0420	5.1910	0.0345	5.2255	1.3859	0.0323	1.4183	0.0000	4,086.7417	4,086.7417	0.2525	0.1952	4,151.2102
Waste						0.0000	0.0000		0.0000	0.0000	29.8092	0.0000	29.8092	1.7617	0.0000	73.8511
Water						0.0000	0.0000		0.0000	0.0000	6.0821	8.6332	14.7153	0.6261	0.0149	34.8044
Total	**3.0496**	**2.9213**	**21.1057**	**0.0428**	**5.1910**	**0.0444**	**5.2354**	**1.3859**	**0.0422**	**1.4282**	**35.8914**	**4,365.9958**	**4,401.8871**	**2.6644**	**0.2147**	**4,532.4675**

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	0.6769	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0242	0.0242	6.0000e-005	0.0000	0.0258
Energy	0.0143	0.1301	0.1093	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003	0.0000	270.0127	270.0127	0.0239	4.6200e-003	271.9869
Mobile	2.0371	2.1580	16.5085	0.0305	3.7267	0.0257	3.7523	0.9950	0.0241	1.0190	0.0000	2,968.0625	2,968.0625	0.2075	0.1533	3,018.9411
Waste						0.0000	0.0000		0.0000	0.0000	14.9046	0.0000	14.9046	0.8808	0.0000	36.9255
Water						0.0000	0.0000		0.0000	0.0000	4.8657	7.2753	12.1410	0.5010	0.0119	28.2156
Total	**2.7284**	**2.2882**	**16.6302**	**0.0313**	**3.7267**	**0.0356**	**3.7622**	**0.9950**	**0.0340**	**1.0290**	**19.7703**	**3,245.3748**	**3,265.1451**	**1.6132**	**0.1699**	**3,356.0948**

	ROG	NOx	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	**10.53**	**21.67**	**21.21**	**26.88**	**28.21**	**19.81**	**28.14**	**28.21**	**19.56**	**27.95**	**44.92**	**25.67**	**25.82**	**39.45**	**20.87**	**25.95**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2024	11/23/2029	5	1540	
2	Paving	Paving	11/1/2029	12/19/2029	5	35	
3	Architectural Coating	Architectural Coating	4/1/2024	12/28/2029	5	1500	

Dana Reserve Commercial and Educational - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 29.23

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 214,500; Non-Residential Outdoor: 71,500; Striped Parking Area: 13,728 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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
Building Construction	9	145.00	61.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	29.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179
Total	**0.1928**	**1.7611**	**2.1179**	**3.5300e-003**		**0.0803**	**0.0803**		**0.0756**	**0.0756**	**0.0000**	**303.7223**	**303.7223**	**0.0718**	**0.0000**	**305.5179**

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	9.0400e-003	0.3240	0.1039	1.1700e-003	0.0363	1.8400e-003	0.0382	0.0105	1.7600e-003	0.0123	0.0000	113.5155	113.5155	2.5900e-003	0.0167	118.5478
Worker	0.0570	0.0393	0.4682	1.4800e-003	0.1829	8.6000e-004	0.1837	0.0486	7.9000e-004	0.0494	0.0000	138.7284	138.7284	3.5700e-003	3.7500e-003	139.9338
Total	**0.0660**	**0.3632**	**0.5721**	**2.6500e-003**	**0.2192**	**2.7000e-003**	**0.2219**	**0.0591**	**2.5500e-003**	**0.0617**	**0.0000**	**252.2439**	**252.2439**	**6.1600e-003**	**0.0204**	**258.4816**

Dana Reserve Commercial and Educational - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	0.0883	1.8636	2.3415	3.5300e-003		0.1184	0.1184		0.1184	0.1184	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175
Total	**0.0883**	**1.8636**	**2.3415**	**3.5300e-003**		**0.1184**	**0.1184**		**0.1184**	**0.1184**	**0.0000**	**303.7220**	**303.7220**	**0.0718**	**0.0000**	**305.5175**

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	9.0400e-003	0.3240	0.1039	1.1700e-003	0.0363	1.8400e-003	0.0382	0.0105	1.7600e-003	0.0123	0.0000	113.5155	113.5155	2.5900e-003	0.0167	118.5478
Worker	0.0570	0.0393	0.4682	1.4800e-003	0.1829	8.6000e-004	0.1837	0.0486	7.9000e-004	0.0494	0.0000	138.7284	138.7284	3.5700e-003	3.7500e-003	139.9338
Total	**0.0660**	**0.3632**	**0.5721**	**2.6500e-003**	**0.2192**	**2.7000e-003**	**0.2219**	**0.0591**	**2.5500e-003**	**0.0617**	**0.0000**	**252.2439**	**252.2439**	**6.1600e-003**	**0.0204**	**258.4816**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	8.7200e-003	0.3159	0.1020	1.1400e-003	0.0362	1.7900e-003	0.0380	0.0105	1.7100e-003	0.0122	0.0000	111.1240	111.1240	2.6200e-003	0.0163	116.0486
Worker	0.0537	0.0352	0.4367	1.4300e-003	0.1822	8.1000e-004	0.1830	0.0484	7.5000e-004	0.0492	0.0000	135.0334	135.0334	3.2400e-003	3.4900e-003	136.1535
Total	**0.0624**	**0.3510**	**0.5387**	**2.5700e-003**	**0.2184**	**2.6000e-003**	**0.2210**	**0.0589**	**2.4600e-003**	**0.0613**	**0.0000**	**246.1574**	**246.1574**	**5.8600e-003**	**0.0198**	**252.2021**

Dana Reserve Commercial and Educational - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	0.0879	1.8565	2.3325	3.5200e-003		0.1179	0.1179		0.1179	0.1179	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.0879**	**1.8565**	**2.3325**	**3.5200e-003**		**0.1179**	**0.1179**		**0.1179**	**0.1179**	**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	8.7200e-003	0.3159	0.1020	1.1400e-003	0.0362	1.7900e-003	0.0380	0.0105	1.7100e-003	0.0122	0.0000	111.1240	111.1240	2.6200e-003	0.0163	116.0486
Worker	0.0537	0.0352	0.4367	1.4300e-003	0.1822	8.1000e-004	0.1830	0.0484	7.5000e-004	0.0492	0.0000	135.0334	135.0334	3.2400e-003	3.4900e-003	136.1535
Total	**0.0624**	**0.3510**	**0.5387**	**2.5700e-003**	**0.2184**	**2.6000e-003**	**0.2210**	**0.0589**	**2.4600e-003**	**0.0613**	**0.0000**	**246.1574**	**246.1574**	**5.8600e-003**	**0.0198**	**252.2021**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	0.1785	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	8.4500e-003	0.3090	0.1008	1.1200e-003	0.0362	1.7400e-003	0.0380	0.0105	1.6700e-003	0.0121	0.0000	109.1323	109.1323	2.6600e-003	0.0160	113.9671
Worker	0.0510	0.0319	0.4116	1.3900e-003	0.1822	7.8000e-004	0.1830	0.0484	7.1000e-004	0.0491	0.0000	131.9904	131.9904	2.9600e-003	3.2800e-003	133.0427
Total	**0.0595**	**0.3409**	**0.5123**	**2.5100e-003**	**0.2184**	**2.5200e-003**	**0.2209**	**0.0589**	**2.3800e-003**	**0.0613**	**0.0000**	**241.1227**	**241.1227**	**5.6200e-003**	**0.0193**	**247.0098**

Dana Reserve Commercial and Educational - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	0.0879	1.8565	2.3325	3.5200e-003		0.1179	0.1179		0.1179	0.1179	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.0879**	**1.8565**	**2.3325**	**3.5200e-003**		**0.1179**	**0.1179**		**0.1179**	**0.1179**	**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	8.4500e-003	0.3090	0.1008	1.1200e-003	0.0362	1.7400e-003	0.0380	0.0105	1.6700e-003	0.0121	0.0000	109.1323	109.1323	2.6600e-003	0.0160	113.9671
Worker	0.0510	0.0319	0.4116	1.3900e-003	0.1822	7.8000e-004	0.1830	0.0484	7.1000e-004	0.0491	0.0000	131.9904	131.9904	2.9600e-003	3.2800e-003	133.0427
Total	**0.0595**	**0.3409**	**0.5123**	**2.5100e-003**	**0.2184**	**2.5200e-003**	**0.2209**	**0.0589**	**2.3800e-003**	**0.0613**	**0.0000**	**241.1227**	**241.1227**	**5.6200e-003**	**0.0193**	**247.0098**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2027

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	8.2200e-003	0.3025	0.0998	1.1000e-003	0.0362	1.7000e-003	0.0379	0.0105	1.6200e-003	0.0121	0.0000	106.9834	106.9834	2.6900e-003	0.0157	111.7226
Worker	0.0485	0.0291	0.3899	1.3500e-003	0.1822	7.3000e-004	0.1829	0.0484	6.7000e-004	0.0491	0.0000	129.1600	129.1600	2.7200e-003	3.1100e-003	130.1546
Total	**0.0567**	**0.3316**	**0.4897**	**2.4500e-003**	**0.2184**	**2.4300e-003**	**0.2208**	**0.0589**	**2.2900e-003**	**0.0612**	**0.0000**	**236.1434**	**236.1434**	**5.4100e-003**	**0.0188**	**241.8772**

Dana Reserve Commercial and Educational - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2027

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	0.0879	1.8565	2.3325	3.5200e-003		0.1179	0.1179		0.1179	0.1179	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.0879**	**1.8565**	**2.3325**	**3.5200e-003**		**0.1179**	**0.1179**		**0.1179**	**0.1179**	**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	8.2200e-003	0.3025	0.0998	1.1000e-003	0.0362	1.7000e-003	0.0379	0.0105	1.6200e-003	0.0121	0.0000	106.9834	106.9834	2.6900e-003	0.0157	111.7226
Worker	0.0485	0.0291	0.3899	1.3500e-003	0.1822	7.3000e-004	0.1829	0.0484	6.7000e-004	0.0491	0.0000	129.1600	129.1600	2.7200e-003	3.1100e-003	130.1546
Total	**0.0567**	**0.3316**	**0.4897**	**2.4500e-003**	**0.2184**	**2.4300e-003**	**0.2208**	**0.0589**	**2.2900e-003**	**0.0612**	**0.0000**	**236.1434**	**236.1434**	**5.4100e-003**	**0.0188**	**241.8772**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2028

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	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671
Total	**0.1778**	**1.6211**	**2.0910**	**3.5000e-003**		**0.0686**	**0.0686**		**0.0645**	**0.0645**	**0.0000**	**301.4953**	**301.4953**	**0.0709**	**0.0000**	**303.2671**

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	7.9900e-003	0.2958	0.0987	1.0700e-003	0.0361	1.6500e-003	0.0377	0.0104	1.5800e-003	0.0120	0.0000	104.5300	104.5300	2.7300e-003	0.0153	109.1599
Worker	0.0459	0.0266	0.3703	1.3000e-003	0.1815	6.8000e-004	0.1822	0.0482	6.3000e-004	0.0489	0.0000	126.1147	126.1147	2.5000e-003	2.9500e-003	127.0569
Total	**0.0539**	**0.3224**	**0.4689**	**2.3700e-003**	**0.2175**	**2.3300e-003**	**0.2199**	**0.0587**	**2.2100e-003**	**0.0609**	**0.0000**	**230.6447**	**230.6447**	**5.2300e-003**	**0.0183**	**236.2168**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2028

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	0.0876	1.8494	2.3236	3.5000e-003		0.1175	0.1175		0.1175	0.1175	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667
Total	**0.0876**	**1.8494**	**2.3236**	**3.5000e-003**		**0.1175**	**0.1175**		**0.1175**	**0.1175**	**0.0000**	**301.4949**	**301.4949**	**0.0709**	**0.0000**	**303.2667**

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	7.9900e-003	0.2958	0.0987	1.0700e-003	0.0361	1.6500e-003	0.0377	0.0104	1.5800e-003	0.0120	0.0000	104.5300	104.5300	2.7300e-003	0.0153	109.1599
Worker	0.0459	0.0266	0.3703	1.3000e-003	0.1815	6.8000e-004	0.1822	0.0482	6.3000e-004	0.0489	0.0000	126.1147	126.1147	2.5000e-003	2.9500e-003	127.0569
Total	**0.0539**	**0.3224**	**0.4689**	**2.3700e-003**	**0.2175**	**2.3300e-003**	**0.2199**	**0.0587**	**2.2100e-003**	**0.0609**	**0.0000**	**230.6447**	**230.6447**	**5.2300e-003**	**0.0183**	**236.2168**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2029

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	0.1607	1.4652	1.8900	3.1700e-003		0.0620	0.0620		0.0583	0.0583	0.0000	272.5054	272.5054	0.0641	0.0000	274.1068
Total	**0.1607**	**1.4652**	**1.8900**	**3.1700e-003**		**0.0620**	**0.0620**		**0.0583**	**0.0583**	**0.0000**	**272.5054**	**272.5054**	**0.0641**	**0.0000**	**274.1068**

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	7.0400e-003	0.2622	0.0886	9.5000e-004	0.0326	1.4500e-003	0.0341	9.4300e-003	1.3900e-003	0.0108	0.0000	92.6042	92.6042	2.5000e-003	0.0136	96.7055
Worker	0.0393	0.0222	0.3202	1.1500e-003	0.1640	5.8000e-004	0.1646	0.0436	5.3000e-004	0.0441	0.0000	111.8923	111.8923	2.0900e-003	2.5600e-003	112.7062
Total	**0.0463**	**0.2844**	**0.4088**	**2.1000e-003**	**0.1966**	**2.0300e-003**	**0.1987**	**0.0530**	**1.9200e-003**	**0.0549**	**0.0000**	**204.4965**	**204.4965**	**4.5900e-003**	**0.0161**	**209.4117**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2029

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	0.0792	1.6716	2.1002	3.1700e-003		0.1062	0.1062		0.1062	0.1062	0.0000	272.5050	272.5050	0.0641	0.0000	274.1065
Total	**0.0792**	**1.6716**	**2.1002**	**3.1700e-003**		**0.1062**	**0.1062**		**0.1062**	**0.1062**	**0.0000**	**272.5050**	**272.5050**	**0.0641**	**0.0000**	**274.1065**

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	7.0400e-003	0.2622	0.0886	9.5000e-004	0.0326	1.4500e-003	0.0341	9.4300e-003	1.3900e-003	0.0108	0.0000	92.6042	92.6042	2.5000e-003	0.0136	96.7055
Worker	0.0393	0.0222	0.3202	1.1500e-003	0.1640	5.8000e-004	0.1646	0.0436	5.3000e-004	0.0441	0.0000	111.8923	111.8923	2.0900e-003	2.5600e-003	112.7062
Total	**0.0463**	**0.2844**	**0.4088**	**2.1000e-003**	**0.1966**	**2.0300e-003**	**0.1987**	**0.0530**	**1.9200e-003**	**0.0549**	**0.0000**	**204.4965**	**204.4965**	**4.5900e-003**	**0.0161**	**209.4117**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 2029

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	0.0383					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0543**	**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	6.1000e-004	3.4000e-004	4.9300e-003	2.0000e-005	2.5300e-003	1.0000e-005	2.5400e-003	6.7000e-004	1.0000e-005	6.8000e-004	0.0000	1.7240	1.7240	3.0000e-005	4.0000e-005	1.7365
Total	**6.1000e-004**	**3.4000e-004**	**4.9300e-003**	**2.0000e-005**	**2.5300e-003**	**1.0000e-005**	**2.5400e-003**	**6.7000e-004**	**1.0000e-005**	**6.8000e-004**	**0.0000**	**1.7240**	**1.7240**	**3.0000e-005**	**4.0000e-005**	**1.7365**

Dana Reserve Commercial and Educational - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 2029

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	9.8200e-003	0.1977	0.3027	4.0000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	35.0337	35.0337	0.0113	0.0000	35.3169
Paving	0.0383					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0481**	**0.1977**	**0.3027**	**4.0000e-004**		**0.0107**	**0.0107**		**0.0107**	**0.0107**	**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	6.1000e-004	3.4000e-004	4.9300e-003	2.0000e-005	2.5300e-003	1.0000e-005	2.5400e-003	6.7000e-004	1.0000e-005	6.8000e-004	0.0000	1.7240	1.7240	3.0000e-005	4.0000e-005	1.7365
Total	**6.1000e-004**	**3.4000e-004**	**4.9300e-003**	**2.0000e-005**	**2.5300e-003**	**1.0000e-005**	**2.5400e-003**	**6.7000e-004**	**1.0000e-005**	**6.8000e-004**	**0.0000**	**1.7240**	**1.7240**	**3.0000e-005**	**4.0000e-005**	**1.7365**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	0.2239					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	**0.2417**	**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**

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	8.5700e-003	5.9100e-003	0.0704	2.2000e-004	0.0275	1.3000e-004	0.0276	7.3100e-003	1.2000e-004	7.4300e-003	0.0000	20.8622	20.8622	5.4000e-004	5.6000e-004	21.0435
Total	**8.5700e-003**	**5.9100e-003**	**0.0704**	**2.2000e-004**	**0.0275**	**1.3000e-004**	**0.0276**	**7.3100e-003**	**1.2000e-004**	**7.4300e-003**	**0.0000**	**20.8622**	**20.8622**	**5.4000e-004**	**5.6000e-004**	**21.0435**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	0.2239					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.8500e-003	0.1337	0.1805	2.9000e-004		9.3700e-003	9.3700e-003		9.3700e-003	9.3700e-003	0.0000	25.1495	25.1495	1.4200e-003	0.0000	25.1849
Total	**0.2297**	**0.1337**	**0.1805**	**2.9000e-004**		**9.3700e-003**	**9.3700e-003**		**9.3700e-003**	**9.3700e-003**	**0.0000**	**25.1495**	**25.1495**	**1.4200e-003**	**0.0000**	**25.1849**

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	8.5700e-003	5.9100e-003	0.0704	2.2000e-004	0.0275	1.3000e-004	0.0276	7.3100e-003	1.2000e-004	7.4300e-003	0.0000	20.8622	20.8622	5.4000e-004	5.6000e-004	21.0435
Total	**8.5700e-003**	**5.9100e-003**	**0.0704**	**2.2000e-004**	**0.0275**	**1.3000e-004**	**0.0276**	**7.3100e-003**	**1.2000e-004**	**7.4300e-003**	**0.0000**	**20.8622**	**20.8622**	**5.4000e-004**	**5.6000e-004**	**21.0435**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	0.2966					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	**0.3189**	**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	0.0107	7.0300e-003	0.0874	2.9000e-004	0.0364	1.6000e-004	0.0366	9.6800e-003	1.5000e-004	9.8300e-003	0.0000	27.0067	27.0067	6.5000e-004	7.0000e-004	27.2307
Total	**0.0107**	**7.0300e-003**	**0.0874**	**2.9000e-004**	**0.0364**	**1.6000e-004**	**0.0366**	**9.6800e-003**	**1.5000e-004**	**9.8300e-003**	**0.0000**	**27.0067**	**27.0067**	**6.5000e-004**	**7.0000e-004**	**27.2307**

3.4 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	0.2966					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**0.3044**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**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	0.0107	7.0300e-003	0.0874	2.9000e-004	0.0364	1.6000e-004	0.0366	9.6800e-003	1.5000e-004	9.8300e-003	0.0000	27.0067	27.0067	6.5000e-004	7.0000e-004	27.2307
Total	**0.0107**	**7.0300e-003**	**0.0874**	**2.9000e-004**	**0.0364**	**1.6000e-004**	**0.0366**	**9.6800e-003**	**1.5000e-004**	**9.8300e-003**	**0.0000**	**27.0067**	**27.0067**	**6.5000e-004**	**7.0000e-004**	**27.2307**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	0.2966					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	**0.3189**	**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	0.0102	6.3700e-003	0.0823	2.8000e-004	0.0364	1.6000e-004	0.0366	9.6800e-003	1.4000e-004	9.8300e-003	0.0000	26.3981	26.3981	5.9000e-004	6.6000e-004	26.6085
Total	**0.0102**	**6.3700e-003**	**0.0823**	**2.8000e-004**	**0.0364**	**1.6000e-004**	**0.0366**	**9.6800e-003**	**1.4000e-004**	**9.8300e-003**	**0.0000**	**26.3981**	**26.3981**	**5.9000e-004**	**6.6000e-004**	**26.6085**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	0.2966					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**0.3044**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**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	0.0102	6.3700e-003	0.0823	2.8000e-004	0.0364	1.6000e-004	0.0366	9.6800e-003	1.4000e-004	9.8300e-003	0.0000	26.3981	26.3981	5.9000e-004	6.6000e-004	26.6085
Total	**0.0102**	**6.3700e-003**	**0.0823**	**2.8000e-004**	**0.0364**	**1.6000e-004**	**0.0366**	**9.6800e-003**	**1.4000e-004**	**9.8300e-003**	**0.0000**	**26.3981**	**26.3981**	**5.9000e-004**	**6.6000e-004**	**26.6085**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Architectural Coating - 2027

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	0.2966					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	**0.3189**	**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	9.7000e-003	5.8100e-003	0.0780	2.7000e-004	0.0364	1.5000e-004	0.0366	9.6800e-003	1.3000e-004	9.8200e-003	0.0000	25.8320	25.8320	5.4000e-004	6.2000e-004	26.0309
Total	**9.7000e-003**	**5.8100e-003**	**0.0780**	**2.7000e-004**	**0.0364**	**1.5000e-004**	**0.0366**	**9.6800e-003**	**1.3000e-004**	**9.8200e-003**	**0.0000**	**25.8320**	**25.8320**	**5.4000e-004**	**6.2000e-004**	**26.0309**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Architectural Coating - 2027

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	0.2966					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**0.3044**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**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	9.7000e-003	5.8100e-003	0.0780	2.7000e-004	0.0364	1.5000e-004	0.0366	9.6800e-003	1.3000e-004	9.8200e-003	0.0000	25.8320	25.8320	5.4000e-004	6.2000e-004	26.0309
Total	**9.7000e-003**	**5.8100e-003**	**0.0780**	**2.7000e-004**	**0.0364**	**1.5000e-004**	**0.0366**	**9.6800e-003**	**1.3000e-004**	**9.8200e-003**	**0.0000**	**25.8320**	**25.8320**	**5.4000e-004**	**6.2000e-004**	**26.0309**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Architectural Coating - 2028

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	0.2955					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0222	0.1489	0.2352	3.9000e-004		6.7000e-003	6.7000e-003		6.7000e-003	6.7000e-003	0.0000	33.1923	33.1923	1.8100e-003	0.0000	33.2376
Total	**0.3177**	**0.1489**	**0.2352**	**3.9000e-004**		**6.7000e-003**	**6.7000e-003**		**6.7000e-003**	**6.7000e-003**	**0.0000**	**33.1923**	**33.1923**	**1.8100e-003**	**0.0000**	**33.2376**

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	9.1700e-003	5.3200e-003	0.0741	2.6000e-004	0.0363	1.4000e-004	0.0364	9.6500e-003	1.3000e-004	9.7700e-003	0.0000	25.2230	25.2230	5.0000e-004	5.9000e-004	25.4114
Total	**9.1700e-003**	**5.3200e-003**	**0.0741**	**2.6000e-004**	**0.0363**	**1.4000e-004**	**0.0364**	**9.6500e-003**	**1.3000e-004**	**9.7700e-003**	**0.0000**	**25.2230**	**25.2230**	**5.0000e-004**	**5.9000e-004**	**25.4114**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Architectural Coating - 2028

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	0.2955					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7300e-003	0.1764	0.2382	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.1923	33.1923	1.8100e-003	0.0000	33.2375
Total	**0.3032**	**0.1764**	**0.2382**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.1923**	**33.1923**	**1.8100e-003**	**0.0000**	**33.2375**

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	9.1700e-003	5.3200e-003	0.0741	2.6000e-004	0.0363	1.4000e-004	0.0364	9.6500e-003	1.3000e-004	9.7700e-003	0.0000	25.2230	25.2230	5.0000e-004	5.9000e-004	25.4114
Total	**9.1700e-003**	**5.3200e-003**	**0.0741**	**2.6000e-004**	**0.0363**	**1.4000e-004**	**0.0364**	**9.6500e-003**	**1.3000e-004**	**9.7700e-003**	**0.0000**	**25.2230**	**25.2230**	**5.0000e-004**	**5.9000e-004**	**25.4114**

3.4 Architectural Coating - 2029

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	0.2955					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0222	0.1489	0.2352	3.9000e-004		6.7000e-003	6.7000e-003		6.7000e-003	6.7000e-003	0.0000	33.1923	33.1923	1.8100e-003	0.0000	33.2376
Total	**0.3177**	**0.1489**	**0.2352**	**3.9000e-004**		**6.7000e-003**	**6.7000e-003**		**6.7000e-003**	**6.7000e-003**	**0.0000**	**33.1923**	**33.1923**	**1.8100e-003**	**0.0000**	**33.2376**

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	8.6900e-003	4.9200e-003	0.0709	2.5000e-004	0.0363	1.3000e-004	0.0364	9.6500e-003	1.2000e-004	9.7600e-003	0.0000	24.7592	24.7592	4.6000e-004	5.7000e-004	24.9392
Total	**8.6900e-003**	**4.9200e-003**	**0.0709**	**2.5000e-004**	**0.0363**	**1.3000e-004**	**0.0364**	**9.6500e-003**	**1.2000e-004**	**9.7600e-003**	**0.0000**	**24.7592**	**24.7592**	**4.6000e-004**	**5.7000e-004**	**24.9392**

3.4 Architectural Coating - 2029

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	0.2955					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7300e-003	0.1764	0.2382	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.1923	33.1923	1.8100e-003	0.0000	33.2375
Total	**0.3032**	**0.1764**	**0.2382**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.1923**	**33.1923**	**1.8100e-003**	**0.0000**	**33.2375**

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	8.6900e-003	4.9200e-003	0.0709	2.5000e-004	0.0363	1.3000e-004	0.0364	9.6500e-003	1.2000e-004	9.7600e-003	0.0000	24.7592	24.7592	4.6000e-004	5.7000e-004	24.9392
Total	**8.6900e-003**	**4.9200e-003**	**0.0709**	**2.5000e-004**	**0.0363**	**1.3000e-004**	**0.0364**	**9.6500e-003**	**1.2000e-004**	**9.7600e-003**	**0.0000**	**24.7592**	**24.7592**	**4.6000e-004**	**5.7000e-004**	**24.9392**

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 Diversity

Improve Destination Accessibility

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	2.0371	2.1580	16.5085	0.0305	3.7267	0.0257	3.7523	0.9950	0.0241	1.0190	0.0000	2,968.0625	2,968.0625	0.2075	0.1533	3,018.9411
Unmitigated	2.3584	2.7912	20.9840	0.0420	5.1910	0.0345	5.2255	1.3859	0.0323	1.4183	0.0000	4,086.7417	4,086.7417	0.2525	0.1952	4,151.2102

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	608.10	336.90	36.00	895,912	643,181
Office Park	6,211.80	147.60	2267.10	12,175,027	8,740,533
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	321.08	1,060.76	117.07	835,393	599,734
Total	7,140.98	1,545.26	2,420.17	13,906,332	9,983,448

4.3 Trip Type Information

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
Junior College (2yr)	13.00	5.00	5.00	6.40	88.60	5.00	90	6	4
Office Park	13.00	5.00	5.00	33.00	48.00	19.00	90	6	4
Parking Lot	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	13.00	5.00	5.00	16.30	64.70	19.00	90	6	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.516135	0.058853	0.199929	0.136792	0.029532	0.007795	0.008341	0.005917	0.000885	0.000346	0.029869	0.000792	0.004814
Office Park	0.516135	0.058853	0.199929	0.136792	0.029532	0.007795	0.008341	0.005917	0.000885	0.000346	0.029869	0.000792	0.004814
Parking Lot	0.516135	0.058853	0.199929	0.136792	0.029532	0.007795	0.008341	0.005917	0.000885	0.000346	0.029869	0.000792	0.004814
Regional Shopping Center	0.516135	0.058853	0.199929	0.136792	0.029532	0.007795	0.008341	0.005917	0.000885	0.000346	0.029869	0.000792	0.004814

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Install Energy Efficient Appliances

Dana Reserve Commercial and Educational - San Luis Obispo 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	128.4214	128.4214	0.0212	2.0200e-003	129.5542
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	129.0055	129.0055	0.0213	2.0300e-003	130.1434
NaturalGas Mitigated	0.0143	0.1301	0.1093	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003	0.0000	141.5913	141.5913	2.7100e-003	2.6000e-003	142.4327
NaturalGas Unmitigated	0.0143	0.1301	0.1093	7.8000e-004		9.8800e-003	9.8800e-003		9.8800e-003	9.8800e-003	0.0000	141.5913	141.5913	2.7100e-003	2.6000e-003	142.4327

Dana Reserve Commercial and Educational - San Luis Obispo County, Annual

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					
Junior College (2yr)	717600	3.8700e-003	0.0352	0.0296	2.1000e-004		2.6700e-003	2.6700e-003		2.6700e-003	2.6700e-003	0.0000	38.2939	38.2939	7.3000e-004	7.0000e-004	38.5214
Office Park	1.8819e+006	0.0102	0.0923	0.0775	5.5000e-004		7.0100e-003	7.0100e-003		7.0100e-003	7.0100e-003	0.0000	100.4254	100.4254	1.9200e-003	1.8400e-003	101.0221
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
Regional Shopping Center	53820	2.9000e-004	2.6400e-003	2.2200e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8720	2.8720	6.0000e-005	5.0000e-005	2.8891
Total		**0.0143**	**0.1301**	**0.1093**	**7.8000e-004**		**9.8800e-003**	**9.8800e-003**		**9.8800e-003**	**9.8800e-003**	**0.0000**	**141.5913**	**141.5913**	**2.7100e-003**	**2.5900e-003**	**142.4327**

Dana Reserve Commercial and Educational - San Luis Obispo County, Annual

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					
Junior College (2yr)	717600	3.8700e-003	0.0352	0.0296	2.1000e-004		2.6700e-003	2.6700e-003		2.6700e-003	2.6700e-003	0.0000	38.2939	38.2939	7.3000e-004	7.0000e-004	38.5214
Office Park	1.8819e+006	0.0102	0.0923	0.0775	5.5000e-004		7.0100e-003	7.0100e-003		7.0100e-003	7.0100e-003	0.0000	100.4254	100.4254	1.9200e-003	1.8400e-003	101.0221
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
Regional Shopping Center	53820	2.9000e-004	2.6400e-003	2.2200e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8720	2.8720	6.0000e-005	5.0000e-005	2.8891
Total		**0.0143**	**0.1301**	**0.1093**	**7.8000e-004**		**9.8800e-003**	**9.8800e-003**		**9.8800e-003**	**9.8800e-003**	**0.0000**	**141.5913**	**141.5913**	**2.7100e-003**	**2.5900e-003**	**142.4327**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2yr)	228600	13.1781	2.1800e-003	2.1000e-004	13.2944
Office Park	1.6902e+006	97.4351	0.0161	1.5300e-003	98.2945
Parking Lot	80080	4.6164	7.6000e-004	7.0000e-005	4.6571
Regional Shopping Center	238970	13.7759	2.2800e-003	2.2000e-004	13.8974
Total		**129.0055**	**0.0213**	**2.0300e-003**	**130.1434**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2yr)	228600	13.1781	2.1800e-003	2.1000e-004	13.2944
Office Park	1.68345e+006	97.0459	0.0160	1.5300e-003	97.9019
Parking Lot	80080	4.6164	7.6000e-004	7.0000e-005	4.6571
Regional Shopping Center	235589	13.5810	2.2400e-003	2.1000e-004	13.7008
Total		**128.4214**	**0.0212**	**2.0200e-003**	**129.5542**

6.0 Area Detail

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

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	0.6769	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0242	0.0242	6.0000e-005	0.0000	0.0258
Unmitigated	0.6769	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0242	0.0242	6.0000e-005	0.0000	0.0258

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	0.0347					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6411					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1300e-003	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0242	0.0242	6.0000e-005	0.0000	0.0258
Total	**0.6769**	**1.1000e-004**	**0.0124**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0242**	**0.0242**	**6.0000e-005**	**0.0000**	**0.0258**

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	0.0347					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6411					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1300e-003	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0242	0.0242	6.0000e-005	0.0000	0.0258
Total	**0.6769**	**1.1000e-004**	**0.0124**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0242**	**0.0242**	**6.0000e-005**	**0.0000**	**0.0258**

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	12.1410	0.5010	0.0119	28.2156
Unmitigated	14.7153	0.6261	0.0149	34.8044

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2yr)	1.47147 / 2.30153	1.3902	0.0481	1.1500e-003	2.9344
Office Park	15.996 / 9.80402	12.0425	0.5224	0.0124	28.8024
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.70367 / 1.04418	1.2826	0.0556	1.3200e-003	3.0676
Total		**14.7153**	**0.6261**	**0.0149**	**34.8044**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2yr)	1.17718 / 2.16114	1.1767	0.0385	9.2000e-004	2.4127
Office Park	12.7968 / 9.20598	9.9090	0.4180	9.9400e-003	23.3193
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.36293 / 0.980488	1.0554	0.0445	1.0600e-003	2.4836
Total		**12.1410**	**0.5010**	**0.0119**	**28.2156**

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	14.9046	0.8808	0.0000	36.9255
Unmitigated	29.8092	1.7617	0.0000	73.8511

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2yr)	39	7.9167	0.4679	0.0000	19.6132
Office Park	83.7	16.9903	1.0041	0.0000	42.0929
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	24.15	4.9022	0.2897	0.0000	12.1451
Total		**29.8092**	**1.7617**	**0.0000**	**73.8511**

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			
Junior College (2yr)	19.5	3.9583	0.2339	0.0000	9.8066
Office Park	41.85	8.4952	0.5021	0.0000	21.0464
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	12.075	2.4511	0.1449	0.0000	6.0725
Total		**14.9046**	**0.8808**	**0.0000**	**36.9256**

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number

11.0 Vegetation

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dana Reserve Commercial and Educational

San Luis Obispo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	90.00	1000sqft	17.21	90,000.00	0
Junior College (2yr)	30.00	1000sqft	0.69	30,000.00	0
Parking Lot	572.00	Space	5.15	228,800.00	0
Regional Shopping Center	23.00	1000sqft	4.40	23,000.00	0
Other Asphalt Surfaces	24.08	Acre	24.08	1,048,924.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
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 - Contruction of commercial and educational will be completed on 2029. Utility intensity factor based on renewable portfolio standard for PG&E for 2030 operational year.

Land Use - Parking lot spaces are based on development standard which state 1sp/250 sqft of commercial space. Lot Acreage based on SP. Other Asphalt Surface used for residential roads

Construction Phase - Grubbing, site prep, and grading will take place with residential construction.

Off-road Equipment - Default

Off-road Equipment - Default

Off-road Equipment - Default

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Trips - Trip gen for weekday and sunday is based on traffic report, used defualts for saturday. Office park and retail are lumped in traffic report so their trip gens are split proportionally based on square footage. Trip Type is based on traffic report.

Area Coating - Use low VOC paint.

Construction Off-road Equipment Mitigation - Tier 3 engines, soil stabilizers, water exposed areas 3 times a day, and enforce vehicle speed on unpaved roads of 15 miles per hour.

Mobile Land Use Mitigation -

Area Mitigation - Use low VOC paints

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	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	3.00
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	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	35.00	1,500.00
tblConstructionPhase	NumDays	440.00	1,540.00
tblConstructionPhase	PhaseEndDate	12/12/2025	12/28/2029
tblConstructionPhase	PhaseEndDate	9/5/2025	11/23/2029
tblConstructionPhase	PhaseEndDate	10/24/2025	12/19/2029
tblConstructionPhase	PhaseStartDate	10/25/2025	4/1/2024
tblConstructionPhase	PhaseStartDate	9/6/2025	11/1/2029
tblLandUse	LotAcreage	2.07	17.21
tblLandUse	LotAcreage	0.53	4.40
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.021
tblProjectCharacteristics	CO2IntensityFactor	203.98	127.09
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.002
tblVehicleTrips	DV_TP	7.00	6.00
tblVehicleTrips	DV_TP	15.00	6.00
tblVehicleTrips	DV_TP	35.00	6.00
tblVehicleTrips	PB_TP	1.00	4.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PB_TP	11.00	4.00
tblVehicleTrips	PR_TP	92.00	90.00
tblVehicleTrips	PR_TP	82.00	90.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	SU_TR	1.21	1.20

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	SU_TR	0.76	25.19
tblVehicleTrips	SU_TR	21.10	5.09
tblVehicleTrips	WD_TR	20.25	20.27
tblVehicleTrips	WD_TR	11.07	69.02
tblVehicleTrips	WD_TR	37.75	13.96

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	4.5123	17.3844	23.1660	0.0529	2.0037	0.6961	2.6997	0.5379	0.6584	1.1963	0.0000	5,243.1088	5,243.1088	0.6763	0.1754	5,312.2728
2025	4.3675	16.2530	22.7852	0.0523	2.0037	0.6002	2.6039	0.5379	0.5678	1.1057	0.0000	5,193.9622	5,193.9622	0.6696	0.1705	5,261.5187
2026	4.3407	16.1748	22.5350	0.0517	2.0037	0.5995	2.6032	0.5379	0.5671	1.1050	0.0000	5,145.0819	5,145.0819	0.6673	0.1660	5,211.2388
2027	4.3157	16.1035	22.3204	0.0512	2.0037	0.5988	2.6025	0.5379	0.5664	1.1043	0.0000	5,097.1404	5,097.1404	0.6652	0.1617	5,161.9446
2028	4.2915	16.0424	22.1408	0.0506	2.0038	0.5980	2.6018	0.5379	0.5657	1.1036	0.0000	5,052.8865	5,052.8865	0.6635	0.1577	5,116.4561
2029	7.4052	24.5823	36.8501	0.0740	2.1521	1.0164	3.1684	0.5773	0.9505	1.5278	0.0000	7,330.0716	7,330.0716	1.3777	0.1561	7,411.0429
Maximum	**7.4052**	**24.5823**	**36.8501**	**0.0740**	**2.1521**	**1.0164**	**3.1684**	**0.5773**	**0.9505**	**1.5278**	**0.0000**	**7,330.0716**	**7,330.0716**	**1.3777**	**0.1754**	**7,411.0429**

Dana Reserve Commercial and Educational - San Luis Obispo 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)

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	3.5933	18.3048	24.8952	0.0529	2.0037	1.0205	3.0241	0.5379	1.0193	1.5572	0.0000	5,243.1088	5,243.1088	0.6763	0.1754	5,312.2728
2025	3.5625	18.2209	24.5976	0.0523	2.0037	1.0198	3.0235	0.5379	1.0186	1.5565	0.0000	5,193.9622	5,193.9622	0.6696	0.1705	5,261.5187
2026	3.5357	18.1427	24.3474	0.0517	2.0037	1.0191	3.0228	0.5379	1.0180	1.5559	0.0000	5,145.0819	5,145.0819	0.6673	0.1660	5,211.2388
2027	3.5108	18.0714	24.1328	0.0512	2.0037	1.0183	3.0221	0.5379	1.0172	1.5552	0.0000	5,097.1404	5,097.1404	0.6652	0.1617	5,161.9446
2028	3.4865	18.0103	23.9532	0.0506	2.0038	1.0176	3.0214	0.5379	1.0166	1.5545	0.0000	5,052.8865	5,052.8865	0.6635	0.1577	5,116.4561
2029	6.2460	29.2637	41.3802	0.0740	2.1521	1.6267	3.7788	0.5773	1.6257	2.2030	0.0000	7,330.0716	7,330.0716	1.3777	0.1561	7,411.0429
Maximum	**6.2460**	**29.2637**	**41.3802**	**0.0740**	**2.1521**	**1.6267**	**3.7788**	**0.5773**	**1.6257**	**2.2030**	**0.0000**	**7,330.0716**	**7,330.0716**	**1.3777**	**0.1754**	**7,411.0429**

	ROG	NOx	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	**18.12**	**-12.65**	**-9.02**	**0.00**	**0.00**	**-63.59**	**-16.05**	**0.00**	**-73.26**	**-39.75**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Dana Reserve Commercial and Educational - San Luis Obispo 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	3.7100	6.8000e-004	0.0751	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1618	0.1618	4.2000e-004		0.1722
Energy	0.0784	0.7127	0.5987	4.2800e-003		0.0542	0.0542		0.0542	0.0542		855.2200	855.2200	0.0164	0.0157	860.3021
Mobile	18.8208	19.8518	153.9165	0.3269	40.3489	0.2614	40.6103	10.7501	0.2451	10.9952		35,068.4819	35,068.4819	2.0070	1.5653	35,585.1038
Total	**22.6091**	**20.5652**	**154.5902**	**0.3312**	**40.3489**	**0.3158**	**40.6647**	**10.7501**	**0.2995**	**11.0497**		**35,923.8636**	**35,923.8636**	**2.0239**	**1.5809**	**36,445.5781**

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	3.7100	6.8000e-004	0.0751	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1618	0.1618	4.2000e-004		0.1722
Energy	0.0784	0.7127	0.5987	4.2800e-003		0.0542	0.0542		0.0542	0.0542		855.2200	855.2200	0.0164	0.0157	860.3021
Mobile	16.4537	15.3504	119.8018	0.2373	28.9668	0.1947	29.1615	7.7176	0.1825	7.9001		25,460.2653	25,460.2653	1.6353	1.2286	25,867.2779
Total	**20.2421**	**16.0637**	**120.4755**	**0.2416**	**28.9668**	**0.2492**	**29.2159**	**7.7176**	**0.2369**	**7.9545**		**26,315.6470**	**26,315.6470**	**1.6521**	**1.2443**	**26,727.7522**

Dana Reserve Commercial and Educational - San Luis Obispo 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	10.47	21.89	22.07	27.05	28.21	21.11	28.15	28.21	20.90	28.01	0.00	26.75	26.75	18.37	21.29	26.66

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2024	11/23/2029	5	1540	
2	Paving	Paving	11/1/2029	12/19/2029	5	35	
3	Architectural Coating	Architectural Coating	4/1/2024	12/28/2029	5	1500	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 29.23

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 214,500; Non-Residential Outdoor: 71,500; Striped Parking Area: 13,728 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
Building Construction	9	145.00	61.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	29.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0700	2.3976	0.7777	8.9000e-003	0.2835	0.0140	0.2975	0.0817	0.0134	0.0951		954.4924	954.4924	0.0219	0.1401	996.7784
Worker	0.4308	0.2702	3.6761	0.0117	1.4335	6.5300e-003	1.4400	0.3802	6.0200e-003	0.3862		1,209.5579	1,209.5579	0.0285	0.0294	1,219.0354
Total	**0.5008**	**2.6678**	**4.4538**	**0.0206**	**1.7170**	**0.0205**	**1.7375**	**0.4619**	**0.0194**	**0.4813**		**2,164.0503**	**2,164.0503**	**0.0504**	**0.1695**	**2,215.8138**

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0700	2.3976	0.7777	8.9000e-003	0.2835	0.0140	0.2975	0.0817	0.0134	0.0951		954.4924	954.4924	0.0219	0.1401	996.7784
Worker	0.4308	0.2702	3.6761	0.0117	1.4335	6.5300e-003	1.4400	0.3802	6.0200e-003	0.3862		1,209.5579	1,209.5579	0.0285	0.0294	1,219.0354
Total	**0.5008**	**2.6678**	**4.4538**	**0.0206**	**1.7170**	**0.0205**	**1.7375**	**0.4619**	**0.0194**	**0.4813**		**2,164.0503**	**2,164.0503**	**0.0504**	**0.1695**	**2,215.8138**

3.2 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**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0678	2.3466	0.7658	8.7400e-003	0.2835	0.0137	0.2972	0.0817	0.0131	0.0948		937.9324	937.9324	0.0222	0.1375	979.4723
Worker	0.4070	0.2427	3.4380	0.0113	1.4335	6.2400e-003	1.4397	0.3802	5.7500e-003	0.3859		1,181.7562	1,181.7562	0.0259	0.0275	1,190.5970
Total	**0.4748**	**2.5893**	**4.2038**	**0.0201**	**1.7170**	**0.0199**	**1.7369**	**0.4619**	**0.0188**	**0.4807**		**2,119.6886**	**2,119.6886**	**0.0481**	**0.1650**	**2,170.0693**

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0678	2.3466	0.7658	8.7400e-003	0.2835	0.0137	0.2972	0.0817	0.0131	0.0948		937.9324	937.9324	0.0222	0.1375	979.4723
Worker	0.4070	0.2427	3.4380	0.0113	1.4335	6.2400e-003	1.4397	0.3802	5.7500e-003	0.3859		1,181.7562	1,181.7562	0.0259	0.0275	1,190.5970
Total	**0.4748**	**2.5893**	**4.2038**	**0.0201**	**1.7170**	**0.0199**	**1.7369**	**0.4619**	**0.0188**	**0.4807**		**2,119.6886**	**2,119.6886**	**0.0481**	**0.1650**	**2,170.0693**

3.2 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**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0659	2.2957	0.7568	8.5700e-003	0.2835	0.0133	0.2968	0.0817	0.0127	0.0944		921.0935	921.0935	0.0225	0.1350	961.8758
Worker	0.3863	0.2200	3.2370	0.0110	1.4335	5.9400e-003	1.4394	0.3802	5.4700e-003	0.3857		1,155.0551	1,155.0551	0.0237	0.0259	1,163.3609
Total	**0.4522**	**2.5157**	**3.9938**	**0.0196**	**1.7170**	**0.0193**	**1.7363**	**0.4619**	**0.0182**	**0.4801**		**2,076.1485**	**2,076.1485**	**0.0462**	**0.1608**	**2,125.2367**

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0659	2.2957	0.7568	8.5700e-003	0.2835	0.0133	0.2968	0.0817	0.0127	0.0944		921.0935	921.0935	0.0225	0.1350	961.8758
Worker	0.3863	0.2200	3.2370	0.0110	1.4335	5.9400e-003	1.4394	0.3802	5.4700e-003	0.3857		1,155.0551	1,155.0551	0.0237	0.0259	1,163.3609
Total	**0.4522**	**2.5157**	**3.9938**	**0.0196**	**1.7170**	**0.0193**	**1.7363**	**0.4619**	**0.0182**	**0.4801**		**2,076.1485**	**2,076.1485**	**0.0462**	**0.1608**	**2,125.2367**

3.2 Building Construction - 2027

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**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2027

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	0.0641	2.2475	0.7496	8.4000e-003	0.2836	0.0130	0.2965	0.0817	0.0124	0.0941		902.9300	902.9300	0.0228	0.1322	942.9061
Worker	0.3669	0.2007	3.0642	0.0107	1.4335	5.6000e-003	1.4391	0.3802	5.1600e-003	0.3854		1,130.2400	1,130.2400	0.0217	0.0245	1,138.0905
Total	**0.4311**	**2.4482**	**3.8138**	**0.0191**	**1.7170**	**0.0186**	**1.7356**	**0.4619**	**0.0176**	**0.4795**		**2,033.1700**	**2,033.1700**	**0.0446**	**0.1568**	**2,080.9966**

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2027

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	0.0641	2.2475	0.7496	8.4000e-003	0.2836	0.0130	0.2965	0.0817	0.0124	0.0941		902.9300	902.9300	0.0228	0.1322	942.9061
Worker	0.3669	0.2007	3.0642	0.0107	1.4335	5.6000e-003	1.4391	0.3802	5.1600e-003	0.3854		1,130.2400	1,130.2400	0.0217	0.0245	1,138.0905
Total	**0.4311**	**2.4482**	**3.8138**	**0.0191**	**1.7170**	**0.0186**	**1.7356**	**0.4619**	**0.0176**	**0.4795**		**2,033.1700**	**2,033.1700**	**0.0446**	**0.1568**	**2,080.9966**

3.2 Building Construction - 2028

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**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2028

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	0.0626	2.2060	0.7442	8.2300e-003	0.2836	0.0127	0.2962	0.0817	0.0121	0.0938		885.5935	885.5935	0.0232	0.1296	924.7983
Worker	0.3480	0.1844	2.9190	0.0104	1.4335	5.2600e-003	1.4388	0.3802	4.8400e-003	0.3850		1,107.8088	1,107.8088	0.0201	0.0234	1,115.2732
Total	**0.4106**	**2.3904**	**3.6632**	**0.0186**	**1.7171**	**0.0179**	**1.7350**	**0.4619**	**0.0170**	**0.4788**		**1,993.4023**	**1,993.4023**	**0.0432**	**0.1530**	**2,040.0715**

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2028

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	0.0626	2.2060	0.7442	8.2300e-003	0.2836	0.0127	0.2962	0.0817	0.0121	0.0938		885.5935	885.5935	0.0232	0.1296	924.7983
Worker	0.3480	0.1844	2.9190	0.0104	1.4335	5.2600e-003	1.4388	0.3802	4.8400e-003	0.3850		1,107.8088	1,107.8088	0.0201	0.0234	1,115.2732
Total	**0.4106**	**2.3904**	**3.6632**	**0.0186**	**1.7171**	**0.0179**	**1.7350**	**0.4619**	**0.0170**	**0.4788**		**1,993.4023**	**1,993.4023**	**0.0432**	**0.1530**	**2,040.0715**

3.2 Building Construction - 2029

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**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2029

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	0.0611	2.1632	0.7393	8.0600e-003	0.2836	0.0123	0.2959	0.0817	0.0118	0.0935		867.9983	867.9983	0.0235	0.1270	906.4207
Worker	0.3296	0.1705	2.7919	0.0101	1.4335	4.9300e-003	1.4384	0.3802	4.5400e-003	0.3847		1,087.4277	1,087.4277	0.0185	0.0224	1,094.5616
Total	**0.3907**	**2.3337**	**3.5312**	**0.0182**	**1.7171**	**0.0173**	**1.7344**	**0.4619**	**0.0163**	**0.4782**		**1,955.4259**	**1,955.4259**	**0.0421**	**0.1493**	**2,000.9823**

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2029

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	0.0611	2.1632	0.7393	8.0600e-003	0.2836	0.0123	0.2959	0.0817	0.0118	0.0935		867.9983	867.9983	0.0235	0.1270	906.4207
Worker	0.3296	0.1705	2.7919	0.0101	1.4335	4.9300e-003	1.4384	0.3802	4.5400e-003	0.3847		1,087.4277	1,087.4277	0.0185	0.0224	1,094.5616
Total	**0.3907**	**2.3337**	**3.5312**	**0.0182**	**1.7171**	**0.0173**	**1.7344**	**0.4619**	**0.0163**	**0.4782**		**1,955.4259**	**1,955.4259**	**0.0421**	**0.1493**	**2,000.9823**

3.3 Paving - 2029

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	2.1881					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.1032**	**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**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 2029

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	0.0341	0.0176	0.2888	1.0500e-003	0.1483	5.1000e-004	0.1488	0.0393	4.7000e-004	0.0398		112.4925	112.4925	1.9200e-003	2.3200e-003	113.2305
Total	**0.0341**	**0.0176**	**0.2888**	**1.0500e-003**	**0.1483**	**5.1000e-004**	**0.1488**	**0.0393**	**4.7000e-004**	**0.0398**		**112.4925**	**112.4925**	**1.9200e-003**	**2.3200e-003**	**113.2305**

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	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	2.1881					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.7490**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 2029

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	0.0341	0.0176	0.2888	1.0500e-003	0.1483	5.1000e-004	0.1488	0.0393	4.7000e-004	0.0398		112.4925	112.4925	1.9200e-003	2.3200e-003	113.2305
Total	**0.0341**	**0.0176**	**0.2888**	**1.0500e-003**	**0.1483**	**5.1000e-004**	**0.1488**	**0.0393**	**4.7000e-004**	**0.0398**		**112.4925**	**112.4925**	**1.9200e-003**	**2.3200e-003**	**113.2305**

3.4 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	2.2730					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	**2.4537**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0862	0.0540	0.7352	2.3400e-003	0.2867	1.3100e-003	0.2880	0.0760	1.2000e-003	0.0772		241.9116	241.9116	5.7000e-003	5.8800e-003	243.8071
Total	**0.0862**	**0.0540**	**0.7352**	**2.3400e-003**	**0.2867**	**1.3100e-003**	**0.2880**	**0.0760**	**1.2000e-003**	**0.0772**		**241.9116**	**241.9116**	**5.7000e-003**	**5.8800e-003**	**243.8071**

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	2.2730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**2.3324**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0862	0.0540	0.7352	2.3400e-003	0.2867	1.3100e-003	0.2880	0.0760	1.2000e-003	0.0772		241.9116	241.9116	5.7000e-003	5.8800e-003	243.8071
Total	**0.0862**	**0.0540**	**0.7352**	**2.3400e-003**	**0.2867**	**1.3100e-003**	**0.2880**	**0.0760**	**1.2000e-003**	**0.0772**		**241.9116**	**241.9116**	**5.7000e-003**	**5.8800e-003**	**243.8071**

3.4 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	2.2730					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	**2.4438**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0814	0.0485	0.6876	2.2700e-003	0.2867	1.2500e-003	0.2880	0.0760	1.1500e-003	0.0772		236.3512	236.3512	5.1900e-003	5.5000e-003	238.1194
Total	**0.0814**	**0.0485**	**0.6876**	**2.2700e-003**	**0.2867**	**1.2500e-003**	**0.2880**	**0.0760**	**1.1500e-003**	**0.0772**		**236.3512**	**236.3512**	**5.1900e-003**	**5.5000e-003**	**238.1194**

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	2.2730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**2.3324**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0814	0.0485	0.6876	2.2700e-003	0.2867	1.2500e-003	0.2880	0.0760	1.1500e-003	0.0772		236.3512	236.3512	5.1900e-003	5.5000e-003	238.1194
Total	**0.0814**	**0.0485**	**0.6876**	**2.2700e-003**	**0.2867**	**1.2500e-003**	**0.2880**	**0.0760**	**1.1500e-003**	**0.0772**		**236.3512**	**236.3512**	**5.1900e-003**	**5.5000e-003**	**238.1194**

3.4 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	2.2730					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	**2.4438**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0773	0.0440	0.6474	2.2000e-003	0.2867	1.1900e-003	0.2879	0.0760	1.0900e-003	0.0771		231.0110	231.0110	4.7400e-003	5.1800e-003	232.6722
Total	**0.0773**	**0.0440**	**0.6474**	**2.2000e-003**	**0.2867**	**1.1900e-003**	**0.2879**	**0.0760**	**1.0900e-003**	**0.0771**		**231.0110**	**231.0110**	**4.7400e-003**	**5.1800e-003**	**232.6722**

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	2.2730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**2.3324**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0773	0.0440	0.6474	2.2000e-003	0.2867	1.1900e-003	0.2879	0.0760	1.0900e-003	0.0771		231.0110	231.0110	4.7400e-003	5.1800e-003	232.6722
Total	**0.0773**	**0.0440**	**0.6474**	**2.2000e-003**	**0.2867**	**1.1900e-003**	**0.2879**	**0.0760**	**1.0900e-003**	**0.0771**		**231.0110**	**231.0110**	**4.7400e-003**	**5.1800e-003**	**232.6722**

3.4 Architectural Coating - 2027

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	2.2730					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	**2.4438**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Architectural Coating - 2027

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	0.0734	0.0401	0.6128	2.1400e-003	0.2867	1.1200e-003	0.2878	0.0760	1.0300e-003	0.0771		226.0480	226.0480	4.3500e-003	4.9000e-003	227.6181
Total	**0.0734**	**0.0401**	**0.6128**	**2.1400e-003**	**0.2867**	**1.1200e-003**	**0.2878**	**0.0760**	**1.0300e-003**	**0.0771**		**226.0480**	**226.0480**	**4.3500e-003**	**4.9000e-003**	**227.6181**

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	2.2730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**2.3324**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Architectural Coating - 2027

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	0.0734	0.0401	0.6128	2.1400e-003	0.2867	1.1200e-003	0.2878	0.0760	1.0300e-003	0.0771		226.0480	226.0480	4.3500e-003	4.9000e-003	227.6181
Total	**0.0734**	**0.0401**	**0.6128**	**2.1400e-003**	**0.2867**	**1.1200e-003**	**0.2878**	**0.0760**	**1.0300e-003**	**0.0771**		**226.0480**	**226.0480**	**4.3500e-003**	**4.9000e-003**	**227.6181**

3.4 Architectural Coating - 2028

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	2.2730					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	**2.4438**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Architectural Coating - 2028

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	0.0696	0.0369	0.5838	2.0800e-003	0.2867	1.0500e-003	0.2878	0.0760	9.7000e-004	0.0770		221.5618	221.5618	4.0100e-003	4.6700e-003	223.0547
Total	**0.0696**	**0.0369**	**0.5838**	**2.0800e-003**	**0.2867**	**1.0500e-003**	**0.2878**	**0.0760**	**9.7000e-004**	**0.0770**		**221.5618**	**221.5618**	**4.0100e-003**	**4.6700e-003**	**223.0547**

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	2.2730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**2.3324**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Architectural Coating - 2028

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	0.0696	0.0369	0.5838	2.0800e-003	0.2867	1.0500e-003	0.2878	0.0760	9.7000e-004	0.0770		221.5618	221.5618	4.0100e-003	4.6700e-003	223.0547
Total	**0.0696**	**0.0369**	**0.5838**	**2.0800e-003**	**0.2867**	**1.0500e-003**	**0.2878**	**0.0760**	**9.7000e-004**	**0.0770**		**221.5618**	**221.5618**	**4.0100e-003**	**4.6700e-003**	**223.0547**

3.4 Architectural Coating - 2029

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	2.2730					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	**2.4438**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Architectural Coating - 2029

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	0.0659	0.0341	0.5584	2.0300e-003	0.2867	9.9000e-004	0.2877	0.0760	9.1000e-004	0.0770		217.4855	217.4855	3.7100e-003	4.4800e-003	218.9123
Total	**0.0659**	**0.0341**	**0.5584**	**2.0300e-003**	**0.2867**	**9.9000e-004**	**0.2877**	**0.0760**	**9.1000e-004**	**0.0770**		**217.4855**	**217.4855**	**3.7100e-003**	**4.4800e-003**	**218.9123**

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	2.2730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**2.3324**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.4 Architectural Coating - 2029

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	0.0659	0.0341	0.5584	2.0300e-003	0.2867	9.9000e-004	0.2877	0.0760	9.1000e-004	0.0770		217.4855	217.4855	3.7100e-003	4.4800e-003	218.9123
Total	**0.0659**	**0.0341**	**0.5584**	**2.0300e-003**	**0.2867**	**9.9000e-004**	**0.2877**	**0.0760**	**9.1000e-004**	**0.0770**		**217.4855**	**217.4855**	**3.7100e-003**	**4.4800e-003**	**218.9123**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Diversity

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

Dana Reserve Commercial and Educational - San Luis Obispo 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	16.4537	15.3504	119.8018	0.2373	28.9668	0.1947	29.1615	7.7176	0.1825	7.9001		25,460.2653	25,460.2653	1.6353	1.2286	25,867.2779
Unmitigated	18.8208	19.8518	153.9165	0.3269	40.3489	0.2614	40.6103	10.7501	0.2451	10.9952		35,068.4819	35,068.4819	2.0070	1.5653	35,585.1038

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	608.10	336.90	36.00	895,912	643,181
Office Park	6,211.80	147.60	2267.10	12,175,027	8,740,533
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	321.08	1,060.76	117.07	835,393	599,734
Total	7,140.98	1,545.26	2,420.17	13,906,332	9,983,448

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
Junior College (2yr)	13.00	5.00	5.00	6.40	88.60	5.00	90	6	4
Office Park	13.00	5.00	5.00	33.00	48.00	19.00	90	6	4
Parking Lot	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	13.00	5.00	5.00	16.30	64.70	19.00	90	6	4

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.516135	0.058853	0.199929	0.136792	0.029532	0.007795	0.008341	0.005917	0.000885	0.000346	0.029869	0.000792	0.004814
Office Park	0.516135	0.058853	0.199929	0.136792	0.029532	0.007795	0.008341	0.005917	0.000885	0.000346	0.029869	0.000792	0.004814
Parking Lot	0.516135	0.058853	0.199929	0.136792	0.029532	0.007795	0.008341	0.005917	0.000885	0.000346	0.029869	0.000792	0.004814
Regional Shopping Center	0.516135	0.058853	0.199929	0.136792	0.029532	0.007795	0.008341	0.005917	0.000885	0.000346	0.029869	0.000792	0.004814

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0784	0.7127	0.5987	4.2800e-003		0.0542	0.0542		0.0542	0.0542		855.2200	855.2200	0.0164	0.0157	860.3021
NaturalGas Unmitigated	0.0784	0.7127	0.5987	4.2800e-003		0.0542	0.0542		0.0542	0.0542		855.2200	855.2200	0.0164	0.0157	860.3021

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

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					
Junior College (2yr)	1966.03	0.0212	0.1928	0.1619	1.1600e-003		0.0147	0.0147		0.0147	0.0147		231.2973	231.2973	4.4300e-003	4.2400e-003	232.6718
Office Park	5155.89	0.0556	0.5055	0.4246	3.0300e-003		0.0384	0.0384		0.0384	0.0384		606.5753	606.5753	0.0116	0.0111	610.1799
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
Regional Shopping Center	147.452	1.5900e-003	0.0145	0.0121	9.0000e-005		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003		17.3473	17.3473	3.3000e-004	3.2000e-004	17.4504
Total		**0.0784**	**0.7127**	**0.5987**	**4.2800e-003**		**0.0542**	**0.0542**		**0.0542**	**0.0542**		**855.2200**	**855.2200**	**0.0164**	**0.0157**	**860.3021**

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					
Junior College (2yr)	1.96603	0.0212	0.1928	0.1619	1.1600e-003		0.0147	0.0147		0.0147	0.0147		231.2973	231.2973	4.4300e-003	4.2400e-003	232.6718
Office Park	5.15589	0.0556	0.5055	0.4246	3.0300e-003		0.0384	0.0384		0.0384	0.0384		606.5753	606.5753	0.0116	0.0111	610.1799
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
Regional Shopping Center	0.147452	1.5900e-003	0.0145	0.0121	9.0000e-005		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003		17.3473	17.3473	3.3000e-004	3.2000e-004	17.4504
Total		**0.0784**	**0.7127**	**0.5987**	**4.2800e-003**		**0.0542**	**0.0542**		**0.0542**	**0.0542**		**855.2200**	**855.2200**	**0.0164**	**0.0157**	**860.3021**

6.0 Area Detail

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

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	lb/day										lb/day					
Mitigated	3.7100	6.8000e-004	0.0751	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1618	0.1618	4.2000e-004		0.1722
Unmitigated	3.7100	6.8000e-004	0.0751	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1618	0.1618	4.2000e-004		0.1722

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	0.1903					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.5128					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.8700e-003	6.8000e-004	0.0751	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1618	0.1618	4.2000e-004		0.1722
Total	**3.7100**	**6.8000e-004**	**0.0751**	**1.0000e-005**		**2.7000e-004**	**2.7000e-004**		**2.7000e-004**	**2.7000e-004**		**0.1618**	**0.1618**	**4.2000e-004**		**0.1722**

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	0.1903					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.5128					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.8700e-003	6.8000e-004	0.0751	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1618	0.1618	4.2000e-004		0.1722
Total	**3.7100**	**6.8000e-004**	**0.0751**	**1.0000e-005**		**2.7000e-004**	**2.7000e-004**		**2.7000e-004**	**2.7000e-004**		**0.1618**	**0.1618**	**4.2000e-004**		**0.1722**

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

Dana Reserve Commercial and Educational - San Luis Obispo County, Summer

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

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dana Reserve Commercial and Educational

San Luis Obispo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	90.00	1000sqft	17.21	90,000.00	0
Junior College (2yr)	30.00	1000sqft	0.69	30,000.00	0
Parking Lot	572.00	Space	5.15	228,800.00	0
Regional Shopping Center	23.00	1000sqft	4.40	23,000.00	0
Other Asphalt Surfaces	24.08	Acre	24.08	1,048,924.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
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 - Contruction of commercial and educational will be completed on 2029. Utility intensity factor based on renewable portfolio standard for PG&E for 2030 operational year.

Land Use - Parking lot spaces are based on development standard which state 1sp/250 sqft of commercial space. Lot Acreage based on SP. Other Asphalt Surface used for residential roads

Construction Phase - Grubbing, site prep, and grading will take place with residential construction.

Off-road Equipment - Default

Off-road Equipment - Default

Off-road Equipment - Default

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Trips - Trip gen for weekday and sunday is based on traffic report, used defualts for saturday. Office park and retail are lumped in traffic report so their trip gens are split proportionally based on square footage. Trip Type is based on traffic report.

Area Coating - Use low VOC paint.

Construction Off-road Equipment Mitigation - Tier 3 engines, soil stabilizers, water exposed areas 3 times a day, and enforce vehicle speed on unpaved roads of 15 miles per hour.

Mobile Land Use Mitigation -

Area Mitigation - Use low VOC paints

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	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	3.00
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	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	35.00	1,500.00
tblConstructionPhase	NumDays	440.00	1,540.00
tblConstructionPhase	PhaseEndDate	12/12/2025	12/28/2029
tblConstructionPhase	PhaseEndDate	9/5/2025	11/23/2029
tblConstructionPhase	PhaseEndDate	10/24/2025	12/19/2029
tblConstructionPhase	PhaseStartDate	10/25/2025	4/1/2024
tblConstructionPhase	PhaseStartDate	9/6/2025	11/1/2029
tblLandUse	LotAcreage	2.07	17.21
tblLandUse	LotAcreage	0.53	4.40
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.021
tblProjectCharacteristics	CO2IntensityFactor	203.98	127.09
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.002
tblVehicleTrips	DV_TP	7.00	6.00
tblVehicleTrips	DV_TP	15.00	6.00
tblVehicleTrips	DV_TP	35.00	6.00
tblVehicleTrips	PB_TP	1.00	4.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PB_TP	11.00	4.00
tblVehicleTrips	PR_TP	92.00	90.00
tblVehicleTrips	PR_TP	82.00	90.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	SU_TR	1.21	1.20

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	SU_TR	0.76	25.19
tblVehicleTrips	SU_TR	21.10	5.09
tblVehicleTrips	WD_TR	20.25	20.27
tblVehicleTrips	WD_TR	11.07	69.02
tblVehicleTrips	WD_TR	37.75	13.96

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	4.5660	17.5095	23.1002	0.0523	2.0037	0.6962	2.6998	0.5379	0.6585	1.1964	0.0000	5,184.1219	5,184.1219	0.6789	0.1788	5,254.3878
2025	4.4195	16.3731	22.7321	0.0517	2.0037	0.6003	2.6040	0.5379	0.5678	1.1057	0.0000	5,136.5469	5,136.5469	0.6720	0.1738	5,205.1388
2026	4.3913	16.2906	22.4915	0.0512	2.0037	0.5996	2.6033	0.5379	0.5671	1.1051	0.0000	5,089.1353	5,089.1353	0.6695	0.1691	5,156.2716
2027	4.3648	16.2156	22.2844	0.0506	2.0037	0.5988	2.6026	0.5379	0.5664	1.1044	0.0000	5,042.5237	5,042.5237	0.6673	0.1646	5,108.2598
2028	4.3387	16.1513	22.1109	0.0501	2.0038	0.5981	2.6019	0.5379	0.5657	1.1037	0.0000	4,999.4464	4,999.4464	0.6655	0.1605	5,063.9073
2029	7.4547	24.6908	36.8202	0.0735	2.1521	1.0164	3.1685	0.5773	0.9506	1.5279	0.0000	7,273.0048	7,273.0048	1.3797	0.1591	7,354.8975
Maximum	**7.4547**	**24.6908**	**36.8202**	**0.0735**	**2.1521**	**1.0164**	**3.1685**	**0.5773**	**0.9506**	**1.5279**	**0.0000**	**7,273.0048**	**7,273.0048**	**1.3797**	**0.1788**	**7,354.8975**

Dana Reserve Commercial and Educational - San Luis Obispo 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)

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	3.6470	18.4299	24.8294	0.0523	2.0037	1.0206	3.0242	0.5379	1.0193	1.5572	0.0000	5,184.1219	5,184.1219	0.6789	0.1788	5,254.3878
2025	3.6145	18.3410	24.5445	0.0517	2.0037	1.0199	3.0236	0.5379	1.0187	1.5566	0.0000	5,136.5469	5,136.5469	0.6720	0.1738	5,205.1388
2026	3.5863	18.2584	24.3039	0.0512	2.0037	1.0192	3.0229	0.5379	1.0180	1.5559	0.0000	5,089.1353	5,089.1353	0.6695	0.1691	5,156.2716
2027	3.5599	18.1834	24.0968	0.0506	2.0037	1.0184	3.0221	0.5379	1.0173	1.5552	0.0000	5,042.5237	5,042.5237	0.6673	0.1646	5,108.2598
2028	3.5338	18.1192	23.9233	0.0501	2.0038	1.0177	3.0214	0.5379	1.0166	1.5546	0.0000	4,999.4464	4,999.4464	0.6655	0.1605	5,063.9073
2029	6.2955	29.3722	41.3503	0.0735	2.1521	1.6268	3.7789	0.5773	1.6257	2.2030	0.0000	7,273.0048	7,273.0048	1.3797	0.1591	7,354.8975
Maximum	**6.2955**	**29.3722**	**41.3503**	**0.0735**	**2.1521**	**1.6268**	**3.7789**	**0.5773**	**1.6257**	**2.2030**	**0.0000**	**7,273.0048**	**7,273.0048**	**1.3797**	**0.1788**	**7,354.8975**

	ROG	NOx	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	**17.94**	**-12.56**	**-9.03**	**0.00**	**0.00**	**-63.59**	**-16.05**	**0.00**	**-73.25**	**-39.75**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Dana Reserve Commercial and Educational - San Luis Obispo 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	3.7100	6.8000e-004	0.0751	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1618	0.1618	4.2000e-004		0.1722
Energy	0.0784	0.7127	0.5987	4.2800e-003		0.0542	0.0542		0.0542	0.0542		855.2200	855.2200	0.0164	0.0157	860.3021
Mobile	18.1994	21.3627	164.2374	0.3169	40.3489	0.2615	40.6104	10.7501	0.2452	10.9953		33,981.9654	33,981.9654	2.1738	1.6518	34,528.5376
Total	**21.9877**	**22.0761**	**164.9112**	**0.3212**	**40.3489**	**0.3159**	**40.6648**	**10.7501**	**0.2996**	**11.0498**		**34,837.3471**	**34,837.3471**	**2.1906**	**1.6675**	**35,389.0119**

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	3.7100	6.8000e-004	0.0751	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1618	0.1618	4.2000e-004		0.1722
Energy	0.0784	0.7127	0.5987	4.2800e-003		0.0542	0.0542		0.0542	0.0542		855.2200	855.2200	0.0164	0.0157	860.3021
Mobile	15.7289	16.5640	129.8145	0.2302	28.9668	0.1948	29.1616	7.7176	0.1826	7.9002		24,686.0604	24,686.0604	1.7936	1.3013	25,118.6937
Total	**19.5172**	**17.2774**	**130.4882**	**0.2345**	**28.9668**	**0.2493**	**29.2160**	**7.7176**	**0.2370**	**7.9546**		**25,541.4421**	**25,541.4421**	**1.8104**	**1.3170**	**25,979.1680**

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	**11.24**	**21.74**	**20.87**	**26.99**	**28.21**	**21.10**	**28.15**	**28.21**	**20.90**	**28.01**	**0.00**	**26.68**	**26.68**	**17.36**	**21.02**	**26.59**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2024	11/23/2029	5	1540	
2	Paving	Paving	11/1/2029	12/19/2029	5	35	
3	Architectural Coating	Architectural Coating	4/1/2024	12/28/2029	5	1500	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 29.23

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 214,500; Non-Residential Outdoor: 71,500; Striped Parking Area: 13,728 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
Building Construction	9	145.00	61.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	29.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0682	2.4788	0.8082	8.9200e-003	0.2835	0.0141	0.2976	0.0817	0.0135	0.0951		956.1575	956.1575	0.0217	0.1404	998.5508
Worker	0.4770	0.3068	3.5958	0.0112	1.4335	6.5300e-003	1.4400	0.3802	6.0200e-003	0.3862		1,159.0145	1,159.0145	0.0308	0.0320	1,169.3209
Total	**0.5453**	**2.7856**	**4.4040**	**0.0202**	**1.7170**	**0.0206**	**1.7376**	**0.4619**	**0.0195**	**0.4814**		**2,115.1720**	**2,115.1720**	**0.0525**	**0.1724**	**2,167.8717**

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0682	2.4788	0.8082	8.9200e-003	0.2835	0.0141	0.2976	0.0817	0.0135	0.0951		956.1575	956.1575	0.0217	0.1404	998.5508
Worker	0.4770	0.3068	3.5958	0.0112	1.4335	6.5300e-003	1.4400	0.3802	6.0200e-003	0.3862		1,159.0145	1,159.0145	0.0308	0.0320	1,169.3209
Total	**0.5453**	**2.7856**	**4.4040**	**0.0202**	**1.7170**	**0.0206**	**1.7376**	**0.4619**	**0.0195**	**0.4814**		**2,115.1720**	**2,115.1720**	**0.0525**	**0.1724**	**2,167.8717**

3.2 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**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0659	2.4272	0.7960	8.7500e-003	0.2835	0.0138	0.2973	0.0817	0.0132	0.0948		939.6437	939.6437	0.0220	0.1379	981.2904
Worker	0.4519	0.2756	3.3686	0.0109	1.4335	6.2400e-003	1.4397	0.3802	5.7500e-003	0.3859		1,132.4840	1,132.4840	0.0281	0.0299	1,142.0987
Total	**0.5178**	**2.7028**	**4.1646**	**0.0196**	**1.7170**	**0.0200**	**1.7370**	**0.4619**	**0.0189**	**0.4808**		**2,072.1277**	**2,072.1277**	**0.0501**	**0.1678**	**2,123.3891**

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0659	2.4272	0.7960	8.7500e-003	0.2835	0.0138	0.2973	0.0817	0.0132	0.0948		939.6437	939.6437	0.0220	0.1379	981.2904
Worker	0.4519	0.2756	3.3686	0.0109	1.4335	6.2400e-003	1.4397	0.3802	5.7500e-003	0.3859		1,132.4840	1,132.4840	0.0281	0.0299	1,142.0987
Total	**0.5178**	**2.7028**	**4.1646**	**0.0196**	**1.7170**	**0.0200**	**1.7370**	**0.4619**	**0.0189**	**0.4808**		**2,072.1277**	**2,072.1277**	**0.0501**	**0.1678**	**2,123.3891**

3.2 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**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0638	2.3756	0.7866	8.5900e-003	0.2835	0.0134	0.2969	0.0817	0.0128	0.0945		922.8412	922.8412	0.0224	0.1353	963.7298
Worker	0.4302	0.2498	3.1759	0.0105	1.4335	5.9400e-003	1.4394	0.3802	5.4700e-003	0.3857		1,106.9764	1,106.9764	0.0257	0.0282	1,116.0099
Total	**0.4940**	**2.6254**	**3.9626**	**0.0191**	**1.7170**	**0.0193**	**1.7363**	**0.4619**	**0.0183**	**0.4802**		**2,029.8176**	**2,029.8176**	**0.0481**	**0.1635**	**2,079.7397**

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0638	2.3756	0.7866	8.5900e-003	0.2835	0.0134	0.2969	0.0817	0.0128	0.0945		922.8412	922.8412	0.0224	0.1353	963.7298
Worker	0.4302	0.2498	3.1759	0.0105	1.4335	5.9400e-003	1.4394	0.3802	5.4700e-003	0.3857		1,106.9764	1,106.9764	0.0257	0.0282	1,116.0099
Total	**0.4940**	**2.6254**	**3.9626**	**0.0191**	**1.7170**	**0.0193**	**1.7363**	**0.4619**	**0.0183**	**0.4802**		**2,029.8176**	**2,029.8176**	**0.0481**	**0.1635**	**2,079.7397**

3.2 Building Construction - 2027

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**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2027

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	2.3269	0.7790	8.4200e-003	0.2836	0.0130	0.2966	0.0817	0.0125	0.0942		904.7060	904.7060	0.0227	0.1326	944.7879
Worker	0.4097	0.2279	3.0096	0.0102	1.4335	5.6000e-003	1.4391	0.3802	5.1600e-003	0.3854		1,083.2461	1,083.2461	0.0236	0.0267	1,091.7849
Total	**0.4716**	**2.5548**	**3.7887**	**0.0187**	**1.7170**	**0.0186**	**1.7357**	**0.4619**	**0.0176**	**0.4795**		**1,987.9521**	**1,987.9521**	**0.0463**	**0.1593**	**2,036.5729**

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2027

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	2.3269	0.7790	8.4200e-003	0.2836	0.0130	0.2966	0.0817	0.0125	0.0942		904.7060	904.7060	0.0227	0.1326	944.7879
Worker	0.4097	0.2279	3.0096	0.0102	1.4335	5.6000e-003	1.4391	0.3802	5.1600e-003	0.3854		1,083.2461	1,083.2461	0.0236	0.0267	1,091.7849
Total	**0.4716**	**2.5548**	**3.7887**	**0.0187**	**1.7170**	**0.0186**	**1.7357**	**0.4619**	**0.0176**	**0.4795**		**1,987.9521**	**1,987.9521**	**0.0463**	**0.1593**	**2,036.5729**

3.2 Building Construction - 2028

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**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2028

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	0.0602	2.2848	0.7734	8.2500e-003	0.2836	0.0127	0.2963	0.0817	0.0122	0.0939		887.3893	887.3893	0.0230	0.1300	926.6994
Worker	0.3894	0.2095	2.8698	9.9600e-003	1.4335	5.2600e-003	1.4388	0.3802	4.8400e-003	0.3850		1,061.7790	1,061.7790	0.0218	0.0254	1,069.8984
Total	**0.4496**	**2.4943**	**3.6432**	**0.0182**	**1.7171**	**0.0180**	**1.7351**	**0.4619**	**0.0170**	**0.4789**		**1,949.1682**	**1,949.1682**	**0.0448**	**0.1554**	**1,996.5977**

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2028

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	0.0602	2.2848	0.7734	8.2500e-003	0.2836	0.0127	0.2963	0.0817	0.0122	0.0939		887.3893	887.3893	0.0230	0.1300	926.6994
Worker	0.3894	0.2095	2.8698	9.9600e-003	1.4335	5.2600e-003	1.4388	0.3802	4.8400e-003	0.3850		1,061.7790	1,061.7790	0.0218	0.0254	1,069.8984
Total	**0.4496**	**2.4943**	**3.6432**	**0.0182**	**1.7171**	**0.0180**	**1.7351**	**0.4619**	**0.0170**	**0.4789**		**1,949.1682**	**1,949.1682**	**0.0448**	**0.1554**	**1,996.5977**

3.2 Building Construction - 2029

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**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2029

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	0.0586	2.2415	0.7682	8.0800e-003	0.2836	0.0124	0.2960	0.0817	0.0119	0.0936		869.8098	869.8098	0.0233	0.1273	908.3372
Worker	0.3695	0.1937	2.7467	9.7000e-003	1.4335	4.9300e-003	1.4384	0.3802	4.5400e-003	0.3847		1,042.2566	1,042.2566	0.0202	0.0244	1,050.0168
Total	**0.4281**	**2.4352**	**3.5149**	**0.0178**	**1.7171**	**0.0173**	**1.7344**	**0.4619**	**0.0164**	**0.4783**		**1,912.0663**	**1,912.0663**	**0.0435**	**0.1517**	**1,958.3540**

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Building Construction - 2029

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	0.0586	2.2415	0.7682	8.0800e-003	0.2836	0.0124	0.2960	0.0817	0.0119	0.0936		869.8098	869.8098	0.0233	0.1273	908.3372
Worker	0.3695	0.1937	2.7467	9.7000e-003	1.4335	4.9300e-003	1.4384	0.3802	4.5400e-003	0.3847		1,042.2566	1,042.2566	0.0202	0.0244	1,050.0168
Total	**0.4281**	**2.4352**	**3.5149**	**0.0178**	**1.7171**	**0.0173**	**1.7344**	**0.4619**	**0.0164**	**0.4783**		**1,912.0663**	**1,912.0663**	**0.0435**	**0.1517**	**1,958.3540**

3.3 Paving - 2029

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	2.1881					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.1032**	**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**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 2029

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	0.0382	0.0200	0.2841	1.0000e-003	0.1483	5.1000e-004	0.1488	0.0393	4.7000e-004	0.0398		107.8197	107.8197	2.0900e-003	2.5200e-003	108.6224
Total	**0.0382**	**0.0200**	**0.2841**	**1.0000e-003**	**0.1483**	**5.1000e-004**	**0.1488**	**0.0393**	**4.7000e-004**	**0.0398**		**107.8197**	**107.8197**	**2.0900e-003**	**2.5200e-003**	**108.6224**

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	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	2.1881					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.7490**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 2029

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	0.0382	0.0200	0.2841	1.0000e-003	0.1483	5.1000e-004	0.1488	0.0393	4.7000e-004	0.0398		107.8197	107.8197	2.0900e-003	2.5200e-003	108.6224
Total	**0.0382**	**0.0200**	**0.2841**	**1.0000e-003**	**0.1483**	**5.1000e-004**	**0.1488**	**0.0393**	**4.7000e-004**	**0.0398**		**107.8197**	**107.8197**	**2.0900e-003**	**2.5200e-003**	**108.6224**

3.4 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	2.2730					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	**2.4537**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0954	0.0614	0.7192	2.2500e-003	0.2867	1.3100e-003	0.2880	0.0760	1.2000e-003	0.0772		231.8029	231.8029	6.1600e-003	6.4000e-003	233.8642
Total	**0.0954**	**0.0614**	**0.7192**	**2.2500e-003**	**0.2867**	**1.3100e-003**	**0.2880**	**0.0760**	**1.2000e-003**	**0.0772**		**231.8029**	**231.8029**	**6.1600e-003**	**6.4000e-003**	**233.8642**

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	2.2730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**2.3324**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0954	0.0614	0.7192	2.2500e-003	0.2867	1.3100e-003	0.2880	0.0760	1.2000e-003	0.0772		231.8029	231.8029	6.1600e-003	6.4000e-003	233.8642
Total	**0.0954**	**0.0614**	**0.7192**	**2.2500e-003**	**0.2867**	**1.3100e-003**	**0.2880**	**0.0760**	**1.2000e-003**	**0.0772**		**231.8029**	**231.8029**	**6.1600e-003**	**6.4000e-003**	**233.8642**

3.4 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	2.2730					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	**2.4438**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.4 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	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	0.0904	0.0551	0.6737	2.1700e-003	0.2867	1.2500e-003	0.2880	0.0760	1.1500e-003	0.0772		226.4968	226.4968	5.6200e-003	5.9800e-003	228.4197
Total	**0.0904**	**0.0551**	**0.6737**	**2.1700e-003**	**0.2867**	**1.2500e-003**	**0.2880**	**0.0760**	**1.1500e-003**	**0.0772**		**226.4968**	**226.4968**	**5.6200e-003**	**5.9800e-003**	**228.4197**

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	2.2730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**2.3324**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0904	0.0551	0.6737	2.1700e-003	0.2867	1.2500e-003	0.2880	0.0760	1.1500e-003	0.0772		226.4968	226.4968	5.6200e-003	5.9800e-003	228.4197
Total	**0.0904**	**0.0551**	**0.6737**	**2.1700e-003**	**0.2867**	**1.2500e-003**	**0.2880**	**0.0760**	**1.1500e-003**	**0.0772**		**226.4968**	**226.4968**	**5.6200e-003**	**5.9800e-003**	**228.4197**

3.4 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	2.2730					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	**2.4438**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0860	0.0500	0.6352	2.1100e-003	0.2867	1.1900e-003	0.2879	0.0760	1.0900e-003	0.0771		221.3953	221.3953	5.1400e-003	5.6300e-003	223.2020
Total	**0.0860**	**0.0500**	**0.6352**	**2.1100e-003**	**0.2867**	**1.1900e-003**	**0.2879**	**0.0760**	**1.0900e-003**	**0.0771**		**221.3953**	**221.3953**	**5.1400e-003**	**5.6300e-003**	**223.2020**

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	2.2730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**2.3324**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0860	0.0500	0.6352	2.1100e-003	0.2867	1.1900e-003	0.2879	0.0760	1.0900e-003	0.0771		221.3953	221.3953	5.1400e-003	5.6300e-003	223.2020
Total	**0.0860**	**0.0500**	**0.6352**	**2.1100e-003**	**0.2867**	**1.1900e-003**	**0.2879**	**0.0760**	**1.0900e-003**	**0.0771**		**221.3953**	**221.3953**	**5.1400e-003**	**5.6300e-003**	**223.2020**

3.4 Architectural Coating - 2027

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	2.2730					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	**2.4438**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Architectural Coating - 2027

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	0.0819	0.0456	0.6019	2.0500e-003	0.2867	1.1200e-003	0.2878	0.0760	1.0300e-003	0.0771		216.6492	216.6492	4.7200e-003	5.3300e-003	218.3570
Total	**0.0819**	**0.0456**	**0.6019**	**2.0500e-003**	**0.2867**	**1.1200e-003**	**0.2878**	**0.0760**	**1.0300e-003**	**0.0771**		**216.6492**	**216.6492**	**4.7200e-003**	**5.3300e-003**	**218.3570**

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	2.2730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**2.3324**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Architectural Coating - 2027

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	0.0819	0.0456	0.6019	2.0500e-003	0.2867	1.1200e-003	0.2878	0.0760	1.0300e-003	0.0771		216.6492	216.6492	4.7200e-003	5.3300e-003	218.3570
Total	**0.0819**	**0.0456**	**0.6019**	**2.0500e-003**	**0.2867**	**1.1200e-003**	**0.2878**	**0.0760**	**1.0300e-003**	**0.0771**		**216.6492**	**216.6492**	**4.7200e-003**	**5.3300e-003**	**218.3570**

3.4 Architectural Coating - 2028

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	2.2730					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	**2.4438**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Architectural Coating - 2028

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	0.0779	0.0419	0.5740	1.9900e-003	0.2867	1.0500e-003	0.2878	0.0760	9.7000e-004	0.0770		212.3558	212.3558	4.3600e-003	5.0800e-003	213.9797
Total	**0.0779**	**0.0419**	**0.5740**	**1.9900e-003**	**0.2867**	**1.0500e-003**	**0.2878**	**0.0760**	**9.7000e-004**	**0.0770**		**212.3558**	**212.3558**	**4.3600e-003**	**5.0800e-003**	**213.9797**

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	2.2730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**2.3324**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Architectural Coating - 2028

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	0.0779	0.0419	0.5740	1.9900e-003	0.2867	1.0500e-003	0.2878	0.0760	9.7000e-004	0.0770		212.3558	212.3558	4.3600e-003	5.0800e-003	213.9797
Total	**0.0779**	**0.0419**	**0.5740**	**1.9900e-003**	**0.2867**	**1.0500e-003**	**0.2878**	**0.0760**	**9.7000e-004**	**0.0770**		**212.3558**	**212.3558**	**4.3600e-003**	**5.0800e-003**	**213.9797**

3.4 Architectural Coating - 2029

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	2.2730					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	**2.4438**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.4 Architectural Coating - 2029

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	0.0739	0.0387	0.5493	1.9400e-003	0.2867	9.9000e-004	0.2877	0.0760	9.1000e-004	0.0770		208.4513	208.4513	4.0400e-003	4.8700e-003	210.0034
Total	**0.0739**	**0.0387**	**0.5493**	**1.9400e-003**	**0.2867**	**9.9000e-004**	**0.2877**	**0.0760**	**9.1000e-004**	**0.0770**		**208.4513**	**208.4513**	**4.0400e-003**	**4.8700e-003**	**210.0034**

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	2.2730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**2.3324**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.4 Architectural Coating - 2029

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	0.0739	0.0387	0.5493	1.9400e-003	0.2867	9.9000e-004	0.2877	0.0760	9.1000e-004	0.0770		208.4513	208.4513	4.0400e-003	4.8700e-003	210.0034
Total	**0.0739**	**0.0387**	**0.5493**	**1.9400e-003**	**0.2867**	**9.9000e-004**	**0.2877**	**0.0760**	**9.1000e-004**	**0.0770**		**208.4513**	**208.4513**	**4.0400e-003**	**4.8700e-003**	**210.0034**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Diversity

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

Dana Reserve Commercial and Educational - San Luis Obispo 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	15.7289	16.5640	129.8145	0.2302	28.9668	0.1948	29.1616	7.7176	0.1826	7.9002		24,686.0604	24,686.0604	1.7936	1.3013	25,118.6937
Unmitigated	18.1994	21.3627	164.2374	0.3169	40.3489	0.2615	40.6104	10.7501	0.2452	10.9953		33,981.9654	33,981.9654	2.1738	1.6518	34,528.5376

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2yr)	608.10	336.90	36.00	895,912	643,181
Office Park	6,211.80	147.60	2267.10	12,175,027	8,740,533
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	321.08	1,060.76	117.07	835,393	599,734
Total	7,140.98	1,545.26	2,420.17	13,906,332	9,983,448

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
Junior College (2yr)	13.00	5.00	5.00	6.40	88.60	5.00	90	6	4
Office Park	13.00	5.00	5.00	33.00	48.00	19.00	90	6	4
Parking Lot	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	13.00	5.00	5.00	16.30	64.70	19.00	90	6	4

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2yr)	0.516135	0.058853	0.199929	0.136792	0.029532	0.007795	0.008341	0.005917	0.000885	0.000346	0.029869	0.000792	0.004814
Office Park	0.516135	0.058853	0.199929	0.136792	0.029532	0.007795	0.008341	0.005917	0.000885	0.000346	0.029869	0.000792	0.004814
Parking Lot	0.516135	0.058853	0.199929	0.136792	0.029532	0.007795	0.008341	0.005917	0.000885	0.000346	0.029869	0.000792	0.004814
Regional Shopping Center	0.516135	0.058853	0.199929	0.136792	0.029532	0.007795	0.008341	0.005917	0.000885	0.000346	0.029869	0.000792	0.004814

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0784	0.7127	0.5987	4.2800e-003		0.0542	0.0542		0.0542	0.0542		855.2200	855.2200	0.0164	0.0157	860.3021
NaturalGas Unmitigated	0.0784	0.7127	0.5987	4.2800e-003		0.0542	0.0542		0.0542	0.0542		855.2200	855.2200	0.0164	0.0157	860.3021

Dana Reserve Commercial and Educational - San Luis Obispo County, Winter

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					
Junior College (2yr)	1966.03	0.0212	0.1928	0.1619	1.1600e-003		0.0147	0.0147		0.0147	0.0147		231.2973	231.2973	4.4300e-003	4.2400e-003	232.6718
Office Park	5155.89	0.0556	0.5055	0.4246	3.0300e-003		0.0384	0.0384		0.0384	0.0384		606.5753	606.5753	0.0116	0.0111	610.1799
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
Regional Shopping Center	147.452	1.5900e-003	0.0145	0.0121	9.0000e-005		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003		17.3473	17.3473	3.3000e-004	3.2000e-004	17.4504
Total		**0.0784**	**0.7127**	**0.5987**	**4.2800e-003**		**0.0542**	**0.0542**		**0.0542**	**0.0542**		**855.2200**	**855.2200**	**0.0164**	**0.0157**	**860.3021**

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					
Junior College (2yr)	1.96603	0.0212	0.1928	0.1619	1.1600e-003		0.0147	0.0147		0.0147	0.0147		231.2973	231.2973	4.4300e-003	4.2400e-003	232.6718
Office Park	5.15589	0.0556	0.5055	0.4246	3.0300e-003		0.0384	0.0384		0.0384	0.0384		606.5753	606.5753	0.0116	0.0111	610.1799
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
Regional Shopping Center	0.147452	1.5900e-003	0.0145	0.0121	9.0000e-005		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003		17.3473	17.3473	3.3000e-004	3.2000e-004	17.4504
Total		**0.0784**	**0.7127**	**0.5987**	**4.2800e-003**		**0.0542**	**0.0542**		**0.0542**	**0.0542**		**855.2200**	**855.2200**	**0.0164**	**0.0157**	**860.3021**

6.0 Area Detail

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

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	lb/day										lb/day					
Mitigated	3.7100	6.8000e-004	0.0751	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1618	0.1618	4.2000e-004		0.1722
Unmitigated	3.7100	6.8000e-004	0.0751	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1618	0.1618	4.2000e-004		0.1722

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	0.1903					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.5128					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.8700e-003	6.8000e-004	0.0751	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1618	0.1618	4.2000e-004		0.1722
Total	**3.7100**	**6.8000e-004**	**0.0751**	**1.0000e-005**		**2.7000e-004**	**2.7000e-004**		**2.7000e-004**	**2.7000e-004**		**0.1618**	**0.1618**	**4.2000e-004**		**0.1722**

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	0.1903					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.5128					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.8700e-003	6.8000e-004	0.0751	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1618	0.1618	4.2000e-004		0.1722
Total	**3.7100**	**6.8000e-004**	**0.0751**	**1.0000e-005**		**2.7000e-004**	**2.7000e-004**		**2.7000e-004**	**2.7000e-004**		**0.1618**	**0.1618**	**4.2000e-004**		**0.1722**

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

Dana Reserve Hotel - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dana Reserve Hotel

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	110.00	Room	3.67	60,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
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 - Utility intensity factor is based on renewable portfolio standars for PG&E in year 2027.

Land Use - As per traffic report the hotel is 110 rooms and as per buildout schedule the hotel will be 60,000sqft.

Construction Phase - Demo, site prep, and grading will be completed at start of residential and so are not accounted for in this model run.

Off-road Equipment - Defualt

Off-road Equipment - Defualt

Off-road Equipment - Defualt

Vehicle Trips - Weekday and sunday trip generation is based on traffic report. Trip type is based on traffic report.

Construction Off-road Equipment Mitigation - Tier 3 engines, soil stabilizers, water exposed areas 3 times per day, and a speed limit of 15mph on unpaved roads.

Area Mitigation - Use low VOC paints (50g/L)

Energy Mitigation -

Water Mitigation -

Dana Reserve Hotel - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 3
tblLandUse	LandUseSquareFeet	159,720.00	60,000.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.025
tblProjectCharacteristics	CO2IntensityFactor	203.98	152.51
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.003
tblVehicleTrips	DV_TP	38.00	6.00
tblVehicleTrips	PR_TP	58.00	90.00
tblVehicleTrips	SU_TR	5.95	5.96

2.0 Emissions Summary

Dana Reserve Hotel - San Luis Obispo County, Annual

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					
2026	0.8710	1.5620	2.0576	3.6900e-003	0.0351	0.0647	0.0998	9.4400e-003	0.0608	0.0703	0.0000	321.1348	321.1348	0.0683	2.8500e-003	323.6919
Maximum	**0.8710**	**1.5620**	**2.0576**	**3.6900e-003**	**0.0351**	**0.0647**	**0.0998**	**9.4400e-003**	**0.0608**	**0.0703**	**0.0000**	**321.1348**	**321.1348**	**0.0683**	**2.8500e-003**	**323.6919**

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					
2026	0.7868	1.7799	2.2758	3.6900e-003	0.0351	0.1099	0.1449	9.4400e-003	0.1098	0.1193	0.0000	321.1345	321.1345	0.0683	2.8500e-003	323.6916
Maximum	**0.7868**	**1.7799**	**2.2758**	**3.6900e-003**	**0.0351**	**0.1099**	**0.1449**	**9.4400e-003**	**0.1098**	**0.1193**	**0.0000**	**321.1345**	**321.1345**	**0.0683**	**2.8500e-003**	**323.6916**

	ROG	NOx	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	**9.66**	**-13.95**	**-10.60**	**0.00**	**0.00**	**-69.85**	**-45.29**	**0.00**	**-80.60**	**-69.76**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Dana Reserve Hotel - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2026	3-31-2026	0.4614	0.4955
2	4-1-2026	6-30-2026	0.4657	0.5002
3	7-1-2026	9-30-2026	0.4708	0.5057
		Highest	0.4708	0.5057

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	0.3040	2.0000e-005	1.8500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6000e-003	3.6000e-003	1.0000e-005	0.0000	3.8400e-003
Energy	0.0142	0.1292	0.1085	7.7000e-004		9.8200e-003	9.8200e-003		9.8200e-003	9.8200e-003	0.0000	171.3070	171.3070	7.7300e-003	3.1800e-003	172.4484
Mobile	0.3944	0.4832	3.3283	6.3500e-003	0.7174	5.8800e-003	0.7233	0.1916	5.5100e-003	0.1972	0.0000	607.3319	607.3319	0.0415	0.0311	617.6481
Waste						0.0000	0.0000		0.0000	0.0000	12.2262	0.0000	12.2262	0.7225	0.0000	30.2898
Water						0.0000	0.0000		0.0000	0.0000	0.8853	1.1196	2.0048	0.0911	2.1700e-003	4.9288
Total	**0.7127**	**0.6124**	**3.4386**	**7.1200e-003**	**0.7174**	**0.0157**	**0.7331**	**0.1916**	**0.0153**	**0.2070**	**13.1114**	**779.7621**	**792.8735**	**0.8629**	**0.0365**	**825.3189**

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	0.2484	2.0000e-005	1.8500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6000e-003	3.6000e-003	1.0000e-005	0.0000	3.8400e-003
Energy	0.0142	0.1292	0.1085	7.7000e-004		9.8200e-003	9.8200e-003		9.8200e-003	9.8200e-003	0.0000	170.6471	170.6471	7.6200e-003	3.1700e-003	171.7819
Mobile	0.3944	0.4832	3.3283	6.3500e-003	0.7174	5.8800e-003	0.7233	0.1916	5.5100e-003	0.1972	0.0000	607.3319	607.3319	0.0415	0.0311	617.6481
Waste						0.0000	0.0000		0.0000	0.0000	6.1131	0.0000	6.1131	0.3613	0.0000	15.1449
Water						0.0000	0.0000		0.0000	0.0000	0.7472	0.9520	1.6992	0.0769	1.8300e-003	4.1671
Total	**0.6570**	**0.6124**	**3.4386**	**7.1200e-003**	**0.7174**	**0.0157**	**0.7331**	**0.1916**	**0.0153**	**0.2070**	**6.8602**	**778.9347**	**785.7949**	**0.4873**	**0.0361**	**808.7458**

	ROG	NOx	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	**7.80**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**47.68**	**0.11**	**0.89**	**43.53**	**0.96**	**2.01**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2026	11/18/2026	5	230	
2	Paving	Paving	11/2/2026	11/25/2026	5	18	
3	Architectural Coating	Architectural Coating	11/23/2026	12/16/2026	5	18	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 90,000; Non-Residential Outdoor: 30,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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
Building Construction	9	25.00	10.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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	0.1573	1.4340	1.8497	3.1000e-003		0.0607	0.0607		0.0571	0.0571	0.0000	266.7074	266.7074	0.0627	0.0000	268.2747
Total	**0.1573**	**1.4340**	**1.8497**	**3.1000e-003**		**0.0607**	**0.0607**		**0.0571**	**0.0571**	**0.0000**	**266.7074**	**266.7074**	**0.0627**	**0.0000**	**268.2747**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	1.2200e-003	0.0446	0.0146	1.6000e-004	5.2300e-003	2.5000e-004	5.4800e-003	1.5100e-003	2.4000e-004	1.7500e-003	0.0000	15.7656	15.7656	3.8000e-004	2.3100e-003	16.4641
Worker	7.7500e-003	4.8400e-003	0.0625	2.1000e-004	0.0277	1.2000e-004	0.0278	7.3600e-003	1.1000e-004	7.4600e-003	0.0000	20.0540	20.0540	4.5000e-004	5.0000e-004	20.2139
Total	**8.9700e-003**	**0.0495**	**0.0771**	**3.7000e-004**	**0.0329**	**3.7000e-004**	**0.0333**	**8.8700e-003**	**3.5000e-004**	**9.2100e-003**	**0.0000**	**35.8197**	**35.8197**	**8.3000e-004**	**2.8100e-003**	**36.6780**

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	0.0775	1.6360	2.0555	3.1000e-003		0.1039	0.1039		0.1039	0.1039	0.0000	266.7071	266.7071	0.0627	0.0000	268.2744
Total	**0.0775**	**1.6360**	**2.0555**	**3.1000e-003**		**0.1039**	**0.1039**		**0.1039**	**0.1039**	**0.0000**	**266.7071**	**266.7071**	**0.0627**	**0.0000**	**268.2744**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	1.2200e-003	0.0446	0.0146	1.6000e-004	5.2300e-003	2.5000e-004	5.4800e-003	1.5100e-003	2.4000e-004	1.7500e-003	0.0000	15.7656	15.7656	3.8000e-004	2.3100e-003	16.4641
Worker	7.7500e-003	4.8400e-003	0.0625	2.1000e-004	0.0277	1.2000e-004	0.0278	7.3600e-003	1.1000e-004	7.4600e-003	0.0000	20.0540	20.0540	4.5000e-004	5.0000e-004	20.2139
Total	**8.9700e-003**	**0.0495**	**0.0771**	**3.7000e-004**	**0.0329**	**3.7000e-004**	**0.0333**	**8.8700e-003**	**3.5000e-004**	**9.2100e-003**	**0.0000**	**35.8197**	**35.8197**	**8.3000e-004**	**2.8100e-003**	**36.6780**

3.3 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	7.3800e-003	0.0678	0.1096	1.7000e-004		3.1700e-003	3.1700e-003		2.9300e-003	2.9300e-003	0.0000	14.7404	14.7404	4.6300e-003	0.0000	14.8562
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.3800e-003**	**0.0678**	**0.1096**	**1.7000e-004**		**3.1700e-003**	**3.1700e-003**		**2.9300e-003**	**2.9300e-003**	**0.0000**	**14.7404**	**14.7404**	**4.6300e-003**	**0.0000**	**14.8562**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 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	4.9000e-004	3.0000e-004	3.9200e-003	1.0000e-005	1.7300e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.2556	1.2556	3.0000e-005	3.0000e-005	1.2656
Total	**4.9000e-004**	**3.0000e-004**	**3.9200e-003**	**1.0000e-005**	**1.7300e-003**	**1.0000e-005**	**1.7400e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.2556**	**1.2556**	**3.0000e-005**	**3.0000e-005**	**1.2656**

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	3.9500e-003	0.0818	0.1218	1.7000e-004		4.7200e-003	4.7200e-003		4.7200e-003	4.7200e-003	0.0000	14.7404	14.7404	4.6300e-003	0.0000	14.8562
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.9500e-003**	**0.0818**	**0.1218**	**1.7000e-004**		**4.7200e-003**	**4.7200e-003**		**4.7200e-003**	**4.7200e-003**	**0.0000**	**14.7404**	**14.7404**	**4.6300e-003**	**0.0000**	**14.8562**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 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	4.9000e-004	3.0000e-004	3.9200e-003	1.0000e-005	1.7300e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.2556	1.2556	3.0000e-005	3.0000e-005	1.2656
Total	**4.9000e-004**	**3.0000e-004**	**3.9200e-003**	**1.0000e-005**	**1.7300e-003**	**1.0000e-005**	**1.7400e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.2556**	**1.2556**	**3.0000e-005**	**3.0000e-005**	**1.2656**

3.4 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	0.6953					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	**0.6968**	**0.0103**	**0.0163**	**3.0000e-005**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.3000e-004**	**0.0000**	**2.3011**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	1.2000e-004	8.0000e-005	9.8000e-004	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3139	0.3139	1.0000e-005	1.0000e-005	0.3164
Total	**1.2000e-004**	**8.0000e-005**	**9.8000e-004**	**0.0000**	**4.3000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3139**	**0.3139**	**1.0000e-005**	**1.0000e-005**	**0.3164**

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	0.6953					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3000e-004	0.0122	0.0165	3.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	**0.6958**	**0.0122**	**0.0165**	**3.0000e-005**		**8.6000e-004**	**8.6000e-004**		**8.6000e-004**	**8.6000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.3000e-004**	**0.0000**	**2.3011**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	1.2000e-004	8.0000e-005	9.8000e-004	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3139	0.3139	1.0000e-005	1.0000e-005	0.3164
Total	**1.2000e-004**	**8.0000e-005**	**9.8000e-004**	**0.0000**	**4.3000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3139**	**0.3139**	**1.0000e-005**	**1.0000e-005**	**0.3164**

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

	ROG	NOx	CO	SO2	Fugitive 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	0.3944	0.4832	3.3283	6.3500e-003	0.7174	5.8800e-003	0.7233	0.1916	5.5100e-003	0.1972	0.0000	607.3319	607.3319	0.0415	0.0311	617.6481
Unmitigated	0.3944	0.4832	3.3283	6.3500e-003	0.7174	5.8800e-003	0.7233	0.1916	5.5100e-003	0.1972	0.0000	607.3319	607.3319	0.0415	0.0311	617.6481

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	919.60	900.90	655.60	1,919,910	1,919,910
Total	919.60	900.90	655.60	1,919,910	1,919,910

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
Hotel	13.00	5.00	5.00	19.40	61.60	19.00	90	6	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.502926	0.057913	0.201381	0.142041	0.033535	0.008550	0.008361	0.005979	0.000919	0.000356	0.031380	0.000886	0.005774

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	30.0548	30.0548	4.9300e-003	5.9000e-004	30.3542
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.7148	30.7148	5.0300e-003	6.0000e-004	31.0207
NaturalGas Mitigated	0.0142	0.1292	0.1085	7.7000e-004		9.8200e-003	9.8200e-003		9.8200e-003	9.8200e-003	0.0000	140.5923	140.5923	2.6900e-003	2.5800e-003	141.4278
NaturalGas Unmitigated	0.0142	0.1292	0.1085	7.7000e-004		9.8200e-003	9.8200e-003		9.8200e-003	9.8200e-003	0.0000	140.5923	140.5923	2.6900e-003	2.5800e-003	141.4278

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					
Hotel	2.6346e+006	0.0142	0.1292	0.1085	7.7000e-004		9.8200e-003	9.8200e-003		9.8200e-003	9.8200e-003	0.0000	140.5923	140.5923	2.6900e-003	2.5800e-003	141.4278
Total		**0.0142**	**0.1292**	**0.1085**	**7.7000e-004**		**9.8200e-003**	**9.8200e-003**		**9.8200e-003**	**9.8200e-003**	**0.0000**	**140.5923**	**140.5923**	**2.6900e-003**	**2.5800e-003**	**141.4278**

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					
Hotel	2.6346e+006	0.0142	0.1292	0.1085	7.7000e-004		9.8200e-003	9.8200e-003		9.8200e-003	9.8200e-003	0.0000	140.5923	140.5923	2.6900e-003	2.5800e-003	141.4278
Total		**0.0142**	**0.1292**	**0.1085**	**7.7000e-004**		**9.8200e-003**	**9.8200e-003**		**9.8200e-003**	**9.8200e-003**	**0.0000**	**140.5923**	**140.5923**	**2.6900e-003**	**2.5800e-003**	**141.4278**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	444000	30.7148	5.0300e-003	6.0000e-004	31.0207
Total		**30.7148**	**5.0300e-003**	**6.0000e-004**	**31.0207**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	434460	30.0548	4.9300e-003	5.9000e-004	30.3542
Total		**30.0548**	**4.9300e-003**	**5.9000e-004**	**30.3542**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Dana Reserve Hotel - San Luis Obispo 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 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	0.2484	2.0000e-005	1.8500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6000e-003	3.6000e-003	1.0000e-005	0.0000	3.8400e-003
Unmitigated	0.3040	2.0000e-005	1.8500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6000e-003	3.6000e-003	1.0000e-005	0.0000	3.8400e-003

Dana Reserve Hotel - San Luis Obispo 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	0.0695					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2343					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7000e-004	2.0000e-005	1.8500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6000e-003	3.6000e-003	1.0000e-005	0.0000	3.8400e-003
Total	**0.3040**	**2.0000e-005**	**1.8500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.6000e-003**	**3.6000e-003**	**1.0000e-005**	**0.0000**	**3.8400e-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	0.0139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2343					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7000e-004	2.0000e-005	1.8500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6000e-003	3.6000e-003	1.0000e-005	0.0000	3.8400e-003
Total	**0.2484**	**2.0000e-005**	**1.8500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.6000e-003**	**3.6000e-003**	**1.0000e-005**	**0.0000**	**3.8400e-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

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	1.6992	0.0769	1.8300e-003	4.1671
Unmitigated	2.0048	0.0911	2.1700e-003	4.9288

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	2.79034 / 0.310038	2.0048	0.0911	2.1700e-003	4.9288
Total		**2.0048**	**0.0911**	**2.1700e-003**	**4.9288**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	2.35505 / 0.291126	1.6992	0.0769	1.8300e-003	4.1671
Total		**1.6992**	**0.0769**	**1.8300e-003**	**4.1671**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.1131	0.3613	0.0000	15.1449
Unmitigated	12.2262	0.7225	0.0000	30.2898

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			
Hotel	60.23	12.2262	0.7225	0.0000	30.2898
Total		**12.2262**	**0.7225**	**0.0000**	**30.2898**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	30.115	6.1131	0.3613	0.0000	15.1449
Total		**6.1131**	**0.3613**	**0.0000**	**15.1449**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Dana Reserve Hotel - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dana Reserve Hotel

San Luis Obispo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	110.00	Room	3.67	60,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
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 - Utility intensity factor is based on renewable portfolio standars for PG&E in year 2027.

Land Use - As per traffic report the hotel is 110 rooms and as per buildout schedule the hotel will be 60,000sqft.

Construction Phase - Demo, site prep, and grading will be completed at start of residential and so are not accounted for in this model run.

Off-road Equipment - Defualt

Off-road Equipment - Defualt

Off-road Equipment - Defualt

Vehicle Trips - Weekday and sunday trip generation is based on traffic report. Trip type is based on traffic report.

Construction Off-road Equipment Mitigation - Tier 3 engines, soil stabilizers, water exposed areas 3 times per day, and a speed limit of 15mph on unpaved roads.

Area Mitigation - Use low VOC paints (50g/L)

Energy Mitigation -

Water Mitigation -

Dana Reserve Hotel - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Dana Reserve Hotel - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 3
tblLandUse	LandUseSquareFeet	159,720.00	60,000.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.025
tblProjectCharacteristics	CO2IntensityFactor	203.98	152.51
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.003
tblVehicleTrips	DV_TP	38.00	6.00
tblVehicleTrips	PR_TP	58.00	90.00
tblVehicleTrips	SU_TR	5.95	5.96

2.0 Emissions Summary

Dana Reserve Hotel - San Luis Obispo 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					
2026	78.3072	20.4463	29.3911	0.0507	0.4914	0.8840	1.3753	0.1314	0.8260	0.9573	0.0000	4,871.3312	4,871.3312	1.1793	0.0302	4,909.7997
Maximum	**78.3072**	**20.4463**	**29.3911**	**0.0507**	**0.4914**	**0.8840**	**1.3753**	**0.1314**	**0.8260**	**0.9573**	**0.0000**	**4,871.3312**	**4,871.3312**	**1.1793**	**0.0302**	**4,909.7997**

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					
2026	77.8149	23.7594	32.5347	0.0507	0.4914	1.4322	1.9235	0.1314	1.4319	1.5633	0.0000	4,871.3312	4,871.3312	1.1793	0.0302	4,909.7997
Maximum	**77.8149**	**23.7594**	**32.5347**	**0.0507**	**0.4914**	**1.4322**	**1.9235**	**0.1314**	**1.4319**	**1.5633**	**0.0000**	**4,871.3312**	**4,871.3312**	**1.1793**	**0.0302**	**4,909.7997**

	ROG	NOx	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	**0.63**	**-16.20**	**-10.70**	**0.00**	**0.00**	**-62.01**	**-39.86**	**0.00**	**-73.37**	**-63.30**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Dana Reserve Hotel - San Luis Obispo 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	1.6660	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Energy	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
Mobile	2.3786	2.6066	18.4441	0.0375	4.2326	0.0338	4.2664	1.1283	0.0317	1.1601		3,952.5649	3,952.5649	0.2482	0.1891	4,015.1066
Total	**4.1224**	**3.3143**	**19.0497**	**0.0417**	**4.2326**	**0.0876**	**4.3203**	**1.1283**	**0.0855**	**1.2139**		**4,801.7751**	**4,801.7751**	**0.2645**	**0.2046**	**4,869.3646**

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	1.3612	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Energy	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
Mobile	2.3786	2.6066	18.4441	0.0375	4.2326	0.0338	4.2664	1.1283	0.0317	1.1601		3,952.5649	3,952.5649	0.2482	0.1891	4,015.1066
Total	**3.8176**	**3.3143**	**19.0497**	**0.0417**	**4.2326**	**0.0876**	**4.3203**	**1.1283**	**0.0855**	**1.2139**		**4,801.7751**	**4,801.7751**	**0.2645**	**0.2046**	**4,869.3646**

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	7.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2026	11/18/2026	5	230	
2	Paving	Paving	11/2/2026	11/25/2026	5	18	
3	Architectural Coating	Architectural Coating	11/23/2026	12/16/2026	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 90,000; Non-Residential Outdoor: 30,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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
Building Construction	9	25.00	10.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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**

Dana Reserve Hotel - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0108	0.3763	0.1241	1.4100e-003	0.0465	2.1800e-003	0.0487	0.0134	2.0900e-003	0.0155		150.9989	150.9989	3.6900e-003	0.0221	157.6846
Worker	0.0666	0.0379	0.5581	1.9000e-003	0.2472	1.0200e-003	0.2482	0.0656	9.4000e-004	0.0665		199.1474	199.1474	4.0800e-003	4.4600e-003	200.5795
Total	**0.0774**	**0.4143**	**0.6822**	**3.3100e-003**	**0.2936**	**3.2000e-003**	**0.2968**	**0.0789**	**3.0300e-003**	**0.0820**		**350.1464**	**350.1464**	**7.7700e-003**	**0.0266**	**358.2640**

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0108	0.3763	0.1241	1.4100e-003	0.0465	2.1800e-003	0.0487	0.0134	2.0900e-003	0.0155		150.9989	150.9989	3.6900e-003	0.0221	157.6846
Worker	0.0666	0.0379	0.5581	1.9000e-003	0.2472	1.0200e-003	0.2482	0.0656	9.4000e-004	0.0665		199.1474	199.1474	4.0800e-003	4.4600e-003	200.5795
Total	**0.0774**	**0.4143**	**0.6822**	**3.3100e-003**	**0.2936**	**3.2000e-003**	**0.2968**	**0.0789**	**3.0300e-003**	**0.0820**		**350.1464**	**350.1464**	**7.7700e-003**	**0.0266**	**358.2640**

3.3 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	0.8197	7.5321	12.1778	0.0189		0.3524	0.3524		0.3259	0.3259		1,805.3926	1,805.3926	0.5673		1,819.5741
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8197**	**7.5321**	**12.1778**	**0.0189**		**0.3524**	**0.3524**		**0.3259**	**0.3259**		**1,805.3926**	**1,805.3926**	**0.5673**		**1,819.5741**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 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	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	0.0533	0.0303	0.4465	1.5200e-003	0.1977	8.2000e-004	0.1985	0.0524	7.6000e-004	0.0532		159.3179	159.3179	3.2700e-003	3.5700e-003	160.4636
Total	**0.0533**	**0.0303**	**0.4465**	**1.5200e-003**	**0.1977**	**8.2000e-004**	**0.1985**	**0.0524**	**7.6000e-004**	**0.0532**		**159.3179**	**159.3179**	**3.2700e-003**	**3.5700e-003**	**160.4636**

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	0.4389	9.0888	13.5323	0.0189		0.5246	0.5246		0.5246	0.5246	0.0000	1,805.3926	1,805.3926	0.5673		1,819.5741
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4389**	**9.0888**	**13.5323**	**0.0189**		**0.5246**	**0.5246**		**0.5246**	**0.5246**	**0.0000**	**1,805.3926**	**1,805.3926**	**0.5673**		**1,819.5741**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 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	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	0.0533	0.0303	0.4465	1.5200e-003	0.1977	8.2000e-004	0.1985	0.0524	7.6000e-004	0.0532		159.3179	159.3179	3.2700e-003	3.5700e-003	160.4636
Total	**0.0533**	**0.0303**	**0.4465**	**1.5200e-003**	**0.1977**	**8.2000e-004**	**0.1985**	**0.0524**	**7.6000e-004**	**0.0532**		**159.3179**	**159.3179**	**3.2700e-003**	**3.5700e-003**	**160.4636**

3.4 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	77.2500					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	**77.4209**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0133	7.5900e-003	0.1116	3.8000e-004	0.0494	2.0000e-004	0.0496	0.0131	1.9000e-004	0.0133		39.8295	39.8295	8.2000e-004	8.9000e-004	40.1159
Total	**0.0133**	**7.5900e-003**	**0.1116**	**3.8000e-004**	**0.0494**	**2.0000e-004**	**0.0496**	**0.0131**	**1.9000e-004**	**0.0133**		**39.8295**	**39.8295**	**8.2000e-004**	**8.9000e-004**	**40.1159**

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	77.2500					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**77.3094**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Dana Reserve Hotel - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0133	7.5900e-003	0.1116	3.8000e-004	0.0494	2.0000e-004	0.0496	0.0131	1.9000e-004	0.0133		39.8295	39.8295	8.2000e-004	8.9000e-004	40.1159
Total	**0.0133**	**7.5900e-003**	**0.1116**	**3.8000e-004**	**0.0494**	**2.0000e-004**	**0.0496**	**0.0131**	**1.9000e-004**	**0.0133**		**39.8295**	**39.8295**	**8.2000e-004**	**8.9000e-004**	**40.1159**

Dana Reserve Hotel - San Luis Obispo County, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2.3786	2.6066	18.4441	0.0375	4.2326	0.0338	4.2664	1.1283	0.0317	1.1601		3,952.5649	3,952.5649	0.2482	0.1891	4,015.1066
Unmitigated	2.3786	2.6066	18.4441	0.0375	4.2326	0.0338	4.2664	1.1283	0.0317	1.1601		3,952.5649	3,952.5649	0.2482	0.1891	4,015.1066

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	919.60	900.90	655.60	1,919,910	1,919,910
Total	919.60	900.90	655.60	1,919,910	1,919,910

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
Hotel	13.00	5.00	5.00	19.40	61.60	19.00	90	6	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.502926	0.057913	0.201381	0.142041	0.033535	0.008550	0.008361	0.005979	0.000919	0.000356	0.031380	0.000886	0.005774

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
NaturalGas Unmitigated	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324

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					
Hotel	7218.08	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
Total		**0.0778**	**0.7077**	**0.5944**	**4.2500e-003**		**0.0538**	**0.0538**		**0.0538**	**0.0538**		**849.1861**	**849.1861**	**0.0163**	**0.0156**	**854.2324**

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					
Hotel	7.21808	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
Total		**0.0778**	**0.7077**	**0.5944**	**4.2500e-003**		**0.0538**	**0.0538**		**0.0538**	**0.0538**		**849.1861**	**849.1861**	**0.0163**	**0.0156**	**854.2324**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Dana Reserve Hotel - San Luis Obispo 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 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	1.3612	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Unmitigated	1.6660	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256

Dana Reserve Hotel - San Luis Obispo County, Summer

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	0.3810					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2840					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0300e-003	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Total	**1.6660**	**1.0000e-004**	**0.0112**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0241**	**0.0241**	**6.0000e-005**		**0.0256**

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	0.0762					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2840					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0300e-003	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Total	**1.3612**	**1.0000e-004**	**0.0112**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0241**	**0.0241**	**6.0000e-005**		**0.0256**

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

Dana Reserve Hotel - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dana Reserve Hotel

San Luis Obispo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	110.00	Room	3.67	60,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
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 - Utility intensity factor is based on renewable portfolio standars for PG&E in year 2027.

Land Use - As per traffic report the hotel is 110 rooms and as per buildout schedule the hotel will be 60,000sqft.

Construction Phase - Demo, site prep, and grading will be completed at start of residential and so are not accounted for in this model run.

Off-road Equipment - Defualt

Off-road Equipment - Defualt

Off-road Equipment - Defualt

Vehicle Trips - Weekday and sunday trip generation is based on traffic report. Trip type is based on traffic report.

Construction Off-road Equipment Mitigation - Tier 3 engines, soil stabilizers, water exposed areas 3 times per day, and a speed limit of 15mph on unpaved roads.

Area Mitigation - Use low VOC paints (50g/L)

Energy Mitigation -

Water Mitigation -

Dana Reserve Hotel - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 3
tblLandUse	LandUseSquareFeet	159,720.00	60,000.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.025
tblProjectCharacteristics	CO2IntensityFactor	203.98	152.51
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.003
tblVehicleTrips	DV_TP	38.00	6.00
tblVehicleTrips	PR_TP	58.00	90.00
tblVehicleTrips	SU_TR	5.95	5.96

2.0 Emissions Summary

Dana Reserve Hotel - San Luis Obispo 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					
2026	78.3148	20.4687	29.3770	0.0506	0.4914	0.8840	1.3753	0.1314	0.8260	0.9574	0.0000	4,856.6968	4,856.6968	1.1799	0.0309	4,895.4085
Maximum	**78.3148**	**20.4687**	**29.3770**	**0.0506**	**0.4914**	**0.8840**	**1.3753**	**0.1314**	**0.8260**	**0.9574**	**0.0000**	**4,856.6968**	**4,856.6968**	**1.1799**	**0.0309**	**4,895.4085**

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					
2026	77.8225	23.7818	32.5207	0.0506	0.4914	1.4322	1.9236	0.1314	1.4320	1.5633	0.0000	4,856.6968	4,856.6968	1.1799	0.0309	4,895.4085
Maximum	**77.8225**	**23.7818**	**32.5207**	**0.0506**	**0.4914**	**1.4322**	**1.9236**	**0.1314**	**1.4320**	**1.5633**	**0.0000**	**4,856.6968**	**4,856.6968**	**1.1799**	**0.0309**	**4,895.4085**

	ROG	NOx	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	**0.63**	**-16.19**	**-10.70**	**0.00**	**0.00**	**-62.01**	**-39.86**	**0.00**	**-73.37**	**-63.30**	**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	1.6660	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Energy	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
Mobile	2.3036	2.8018	19.7486	0.0364	4.2326	0.0338	4.2664	1.1283	0.0317	1.1601		3,832.9043	3,832.9043	0.2708	0.1997	3,899.1918
Total	**4.0474**	**3.5095**	**20.3542**	**0.0406**	**4.2326**	**0.0876**	**4.3203**	**1.1283**	**0.0856**	**1.2139**		**4,682.1145**	**4,682.1145**	**0.2871**	**0.2153**	**4,753.4499**

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	1.3612	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Energy	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
Mobile	2.3036	2.8018	19.7486	0.0364	4.2326	0.0338	4.2664	1.1283	0.0317	1.1601		3,832.9043	3,832.9043	0.2708	0.1997	3,899.1918
Total	**3.7426**	**3.5095**	**20.3542**	**0.0406**	**4.2326**	**0.0876**	**4.3203**	**1.1283**	**0.0856**	**1.2139**		**4,682.1145**	**4,682.1145**	**0.2871**	**0.2153**	**4,753.4499**

Dana Reserve Hotel - San Luis Obispo 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	7.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2026	11/18/2026	5	230	
2	Paving	Paving	11/2/2026	11/25/2026	5	18	
3	Architectural Coating	Architectural Coating	11/23/2026	12/16/2026	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 90,000; Non-Residential Outdoor: 30,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36

Dana Reserve Hotel - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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
Building Construction	9	25.00	10.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0105	0.3895	0.1290	1.4100e-003	0.0465	2.2000e-003	0.0487	0.0134	2.1000e-003	0.0155		151.2854	151.2854	3.6700e-003	0.0222	157.9885
Worker	0.0742	0.0431	0.5476	1.8200e-003	0.2472	1.0200e-003	0.2482	0.0656	9.4000e-004	0.0665		190.8580	190.8580	4.4300e-003	4.8500e-003	192.4155
Total	**0.0846**	**0.4325**	**0.6765**	**3.2300e-003**	**0.2936**	**3.2200e-003**	**0.2969**	**0.0789**	**3.0400e-003**	**0.0820**		**342.1434**	**342.1434**	**8.1000e-003**	**0.0270**	**350.4040**

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0105	0.3895	0.1290	1.4100e-003	0.0465	2.2000e-003	0.0487	0.0134	2.1000e-003	0.0155		151.2854	151.2854	3.6700e-003	0.0222	157.9885
Worker	0.0742	0.0431	0.5476	1.8200e-003	0.2472	1.0200e-003	0.2482	0.0656	9.4000e-004	0.0665		190.8580	190.8580	4.4300e-003	4.8500e-003	192.4155
Total	**0.0846**	**0.4325**	**0.6765**	**3.2300e-003**	**0.2936**	**3.2200e-003**	**0.2969**	**0.0789**	**3.0400e-003**	**0.0820**		**342.1434**	**342.1434**	**8.1000e-003**	**0.0270**	**350.4040**

3.3 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	0.8197	7.5321	12.1778	0.0189		0.3524	0.3524		0.3259	0.3259		1,805.3926	1,805.3926	0.5673		1,819.5741
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8197**	**7.5321**	**12.1778**	**0.0189**		**0.3524**	**0.3524**		**0.3259**	**0.3259**		**1,805.3926**	**1,805.3926**	**0.5673**		**1,819.5741**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 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	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	0.0593	0.0345	0.4381	1.4500e-003	0.1977	8.2000e-004	0.1985	0.0524	7.6000e-004	0.0532		152.6864	152.6864	3.5400e-003	3.8800e-003	153.9324
Total	**0.0593**	**0.0345**	**0.4381**	**1.4500e-003**	**0.1977**	**8.2000e-004**	**0.1985**	**0.0524**	**7.6000e-004**	**0.0532**		**152.6864**	**152.6864**	**3.5400e-003**	**3.8800e-003**	**153.9324**

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	0.4389	9.0888	13.5323	0.0189		0.5246	0.5246		0.5246	0.5246	0.0000	1,805.3926	1,805.3926	0.5673		1,819.5741
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4389**	**9.0888**	**13.5323**	**0.0189**		**0.5246**	**0.5246**		**0.5246**	**0.5246**	**0.0000**	**1,805.3926**	**1,805.3926**	**0.5673**		**1,819.5741**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 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	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	0.0593	0.0345	0.4381	1.4500e-003	0.1977	8.2000e-004	0.1985	0.0524	7.6000e-004	0.0532		152.6864	152.6864	3.5400e-003	3.8800e-003	153.9324
Total	**0.0593**	**0.0345**	**0.4381**	**1.4500e-003**	**0.1977**	**8.2000e-004**	**0.1985**	**0.0524**	**7.6000e-004**	**0.0532**		**152.6864**	**152.6864**	**3.5400e-003**	**3.8800e-003**	**153.9324**

3.4 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	77.2500					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	**77.4209**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0148	8.6100e-003	0.1095	3.6000e-004	0.0494	2.0000e-004	0.0496	0.0131	1.9000e-004	0.0133		38.1716	38.1716	8.9000e-004	9.7000e-004	38.4831
Total	**0.0148**	**8.6100e-003**	**0.1095**	**3.6000e-004**	**0.0494**	**2.0000e-004**	**0.0496**	**0.0131**	**1.9000e-004**	**0.0133**		**38.1716**	**38.1716**	**8.9000e-004**	**9.7000e-004**	**38.4831**

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	77.2500					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**77.3094**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0148	8.6100e-003	0.1095	3.6000e-004	0.0494	2.0000e-004	0.0496	0.0131	1.9000e-004	0.0133		38.1716	38.1716	8.9000e-004	9.7000e-004	38.4831
Total	**0.0148**	**8.6100e-003**	**0.1095**	**3.6000e-004**	**0.0494**	**2.0000e-004**	**0.0496**	**0.0131**	**1.9000e-004**	**0.0133**		**38.1716**	**38.1716**	**8.9000e-004**	**9.7000e-004**	**38.4831**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2.3036	2.8018	19.7486	0.0364	4.2326	0.0338	4.2664	1.1283	0.0317	1.1601		3,832.9043	3,832.9043	0.2708	0.1997	3,899.1918
Unmitigated	2.3036	2.8018	19.7486	0.0364	4.2326	0.0338	4.2664	1.1283	0.0317	1.1601		3,832.9043	3,832.9043	0.2708	0.1997	3,899.1918

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	919.60	900.90	655.60	1,919,910	1,919,910
Total	919.60	900.90	655.60	1,919,910	1,919,910

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
Hotel	13.00	5.00	5.00	19.40	61.60	19.00	90	6	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.502926	0.057913	0.201381	0.142041	0.033535	0.008550	0.008361	0.005979	0.000919	0.000356	0.031380	0.000886	0.005774

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
NaturalGas Unmitigated	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324

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					
Hotel	7218.08	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
Total		**0.0778**	**0.7077**	**0.5944**	**4.2500e-003**		**0.0538**	**0.0538**		**0.0538**	**0.0538**		**849.1861**	**849.1861**	**0.0163**	**0.0156**	**854.2324**

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					
Hotel	7.21808	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
Total		**0.0778**	**0.7077**	**0.5944**	**4.2500e-003**		**0.0538**	**0.0538**		**0.0538**	**0.0538**		**849.1861**	**849.1861**	**0.0163**	**0.0156**	**854.2324**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Dana Reserve Hotel - San Luis Obispo 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 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	1.3612	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Unmitigated	1.6660	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256

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	0.3810					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2840					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0300e-003	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Total	**1.6660**	**1.0000e-004**	**0.0112**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0241**	**0.0241**	**6.0000e-005**		**0.0256**

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	0.0762					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2840					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0300e-003	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Total	**1.3612**	**1.0000e-004**	**0.0112**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0241**	**0.0241**	**6.0000e-005**		**0.0256**

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

Dana Reserve Residential 2030 operatioinal

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	610.00	Dwelling Unit	23.50	610,000.00	1745
Single Family Housing	833.00	Dwelling Unit	149.50	1,499,400.00	2382

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
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 - Utility Intensity Factor based on renewable portfolio standars for PG&E for the year of 2030.

Land Use - Apartment Low Rise land use also includes 152 accessory dwelling units (ADU's) as per the traffic report. Lot acreage based on specific plan.

Construction Phase - Construction phasing is based on the anticipated building schedule for Dana Reserve.

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Trips and VMT - defualts

Demolition - No structures are currently on the project site.

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading - Defualts

Vehicle Trips - Trip gen for Weekday and sunday is based on traffic report, sat was left default. Trip length was also left as default. Trip type was based on traffic report.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Use low VOC paint (50g/L)

Construction Off-road Equipment Mitigation - Soil stabilizers, Water exposed areas, and use tier 3 engines.

Mobile Land Use Mitigation - 75 Units will be affordable.

Area Mitigation - Use Low VOC Paints

Energy Mitigation - Based on average residential solar systems production and residential usage 75% of electicity generated will be from residential solar. Use energy efficient appliances.

Water Mitigation - Install low flow fixtures and irrigation.

Waste Mitigation -

Fleet Mix - Based on SJVAPCD Residential fleet mix for year 2030.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	200.00	108.00
tblConstructionPhase	NumDays	120.00	108.00
tblConstructionPhase	NumDays	310.00	130.00
tblConstructionPhase	NumDays	3,100.00	1,545.00
tblConstructionPhase	NumDays	220.00	1,516.00
tblFleetMix	HHD	5.9170e-003	0.02
tblFleetMix	HHD	5.9170e-003	0.02

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD2	7.7950e-003	1.0000e-003
tblFleetMix	LHD2	7.7950e-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	4.8140e-003	3.0000e-003
tblFleetMix	MH	4.8140e-003	3.0000e-003
tblFleetMix	MHD	8.3410e-003	7.4000e-003
tblFleetMix	MHD	8.3410e-003	7.4000e-003
tblFleetMix	OBUS	8.8500e-004	0.00
tblFleetMix	OBUS	8.8500e-004	0.00
tblFleetMix	SBUS	7.9200e-004	1.2000e-003
tblFleetMix	SBUS	7.9200e-004	1.2000e-003
tblFleetMix	UBUS	3.4600e-004	4.4000e-003
tblFleetMix	UBUS	3.4600e-004	4.4000e-003
tblLandUse	LotAcreage	38.13	23.50
tblLandUse	LotAcreage	270.45	149.50
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.021
tblProjectCharacteristics	CO2IntensityFactor	203.98	127.09
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.002

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	DV_TP	11.00	6.00
tblVehicleTrips	DV_TP	11.00	6.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PR_TP	86.00	90.00
tblVehicleTrips	PR_TP	86.00	90.00
tblVehicleTrips	SU_TR	6.28	6.29
tblVehicleTrips	SU_TR	8.55	8.79
tblVehicleTrips	WD_TR	7.32	7.50
tblVehicleTrips	WD_TR	9.44	8.78

2.0 Emissions Summary

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

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					
2023	0.4919	4.8971	3.9509	8.4400e-003	1.6894	0.2150	1.9044	0.7909	0.1983	0.9892	0.0000	741.7244	741.7244	0.2251	6.5000e-004	747.5470
2024	5.3193	2.9454	5.3614	0.0156	1.1790	0.0967	1.2758	0.3155	0.0914	0.4068	0.0000	1,442.9881	1,442.9881	0.1011	0.0644	1,464.6944
2025	6.2322	2.7892	5.2641	0.0155	1.2058	0.0851	1.2908	0.3226	0.0804	0.4030	0.0000	1,442.5491	1,442.5491	0.0994	0.0625	1,463.6576
2026	6.2151	2.7518	5.1073	0.0152	1.2058	0.0847	1.2905	0.3226	0.0801	0.4026	0.0000	1,418.9064	1,418.9064	0.0978	0.0605	1,439.3735
2027	6.1992	2.7183	4.9722	0.0149	1.2058	0.0843	1.2901	0.3226	0.0797	0.4023	0.0000	1,396.1668	1,396.1668	0.0964	0.0586	1,416.0398
2028	6.1599	2.6795	4.8402	0.0146	1.2012	0.0836	1.2848	0.3213	0.0790	0.4004	0.0000	1,370.0572	1,370.0572	0.0949	0.0567	1,389.3261
2029	6.1068	3.4049	6.0453	0.0159	1.1354	0.1234	1.2587	0.3037	0.1155	0.4192	0.0000	1,486.9927	1,486.9927	0.1583	0.0513	1,506.2437
Maximum	**6.2322**	**4.8971**	**6.0453**	**0.0159**	**1.6894**	**0.2150**	**1.9044**	**0.7909**	**0.1983**	**0.9892**	**0.0000**	**1,486.9927**	**1,486.9927**	**0.2251**	**0.0644**	**1,506.2437**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

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					
2023	0.2090	3.9742	5.0408	8.4400e-003	0.6770	0.1823	0.8593	0.3133	0.1823	0.4955	0.0000	741.7235	741.7235	0.2251	6.5000e-004	747.5461
2024	5.2015	3.0630	5.5875	0.0156	1.1790	0.1385	1.3175	0.3155	0.1379	0.4533	0.0000	1,442.9877	1,442.9877	0.1011	0.0644	1,464.6940
2025	6.1272	3.0460	5.5006	0.0155	1.2058	0.1398	1.3456	0.3226	0.1392	0.4618	0.0000	1,442.5487	1,442.5487	0.0994	0.0625	1,463.6572
2026	6.1101	3.0086	5.3438	0.0152	1.2058	0.1395	1.3453	0.3226	0.1389	0.4615	0.0000	1,418.9060	1,418.9060	0.0978	0.0605	1,439.3731
2027	6.0941	2.9751	5.2087	0.0149	1.2058	0.1391	1.3449	0.3226	0.1385	0.4611	0.0000	1,396.1664	1,396.1664	0.0964	0.0586	1,416.0394
2028	6.0552	2.9353	5.0759	0.0146	1.2012	0.1382	1.3394	0.3213	0.1377	0.4590	0.0000	1,370.0568	1,370.0568	0.0949	0.0567	1,389.3257
2029	5.9704	3.9411	6.5619	0.0159	1.1354	0.1950	1.3304	0.3037	0.1946	0.4983	0.0000	1,486.9920	1,486.9920	0.1583	0.0513	1,506.2430
Maximum	**6.1272**	**3.9742**	**6.5619**	**0.0159**	**1.2058**	**0.1950**	**1.3456**	**0.3226**	**0.1946**	**0.4983**	**0.0000**	**1,486.9920**	**1,486.9920**	**0.2251**	**0.0644**	**1,506.2430**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.61**	**-3.41**	**-7.82**	**0.00**	**11.48**	**-38.76**	**7.43**	**17.70**	**-47.59**	**3.88**	**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	**1-2-2023**	**4-1-2023**	1.4154	1.0519
2	**4-2-2023**	**7-1-2023**	1.4839	1.0597
3	**7-2-2023**	**10-1-2023**	1.2331	1.0272
4	**10-2-2023**	**1-1-2024**	1.2155	1.0141

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5	**1-2-2024**	**4-1-2024**	1.3460	1.3456
6	**4-2-2024**	**7-1-2024**	2.2869	2.2869
7	**7-2-2024**	**10-1-2024**	2.3122	2.3123
8	**10-2-2024**	**1-1-2025**	2.3346	2.3351
9	**1-2-2025**	**4-1-2025**	2.2315	2.2688
10	**4-2-2025**	**7-1-2025**	2.2346	2.2724
11	**7-2-2025**	**10-1-2025**	2.2594	2.2976
12	**10-2-2025**	**1-1-2026**	2.2811	2.3193
13	**1-2-2026**	**4-1-2026**	2.2178	2.2551
14	**4-2-2026**	**7-1-2026**	2.2216	2.2594
15	**7-2-2026**	**10-1-2026**	2.2462	2.2844
16	**10-2-2026**	**1-1-2027**	2.2671	2.3054
17	**1-2-2027**	**4-1-2027**	2.2053	2.2427
18	**4-2-2027**	**7-1-2027**	2.2098	2.2476
19	**7-2-2027**	**10-1-2027**	2.2343	2.2725
20	**10-2-2027**	**1-1-2028**	2.2544	2.2926
21	**1-2-2028**	**4-1-2028**	2.2185	2.2563
22	**4-2-2028**	**7-1-2028**	2.1993	2.2371
23	**7-2-2028**	**10-1-2028**	2.2237	2.2619
24	**10-2-2028**	**1-1-2029**	2.2430	2.2812
25	**1-2-2029**	**4-1-2029**	2.3883	2.4762
26	**4-2-2029**	**7-1-2029**	2.4995	2.6140
27	**7-2-2029**	**9-30-2029**	2.4995	2.6140
		Highest	2.4995	2.6140

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	9.4842	0.2259	19.5912	1.0400e-003		0.1089	0.1089		0.1089	0.1089	0.0000	32.0867	32.0867	0.0306	0.0000	32.8510
Energy	0.1521	1.2995	0.5530	8.2900e-003		0.1051	0.1051		0.1051	0.1051	0.0000	2,023.9087	2,023.9087	0.1146	0.0358	2,037.4293
Mobile	2.3087	5.1552	27.6682	0.0917	11.6708	0.0649	11.7356	3.1135	0.0606	3.1741	0.0000	8,981.9570	8,981.9570	0.2753	0.4045	9,109.3782
Waste						0.0000	0.0000		0.0000	0.0000	255.2043	0.0000	255.2043	15.0821	0.0000	632.2579
Water						0.0000	0.0000		0.0000	0.0000	29.8273	41.2856	71.1129	3.0704	0.0730	169.6224
Total	**11.9450**	**6.6806**	**47.8124**	**0.1010**	**11.6708**	**0.2789**	**11.9496**	**3.1135**	**0.2746**	**3.3881**	**285.0316**	**11,079.2380**	**11,364.2696**	**18.5729**	**0.5133**	**11,981.5387**

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	9.4842	0.2259	19.5912	1.0400e-003		0.1089	0.1089		0.1089	0.1089	0.0000	32.0867	32.0867	0.0306	0.0000	32.8510
Energy	0.1521	1.2995	0.5530	8.2900e-003		0.1051	0.1051		0.1051	0.1051	0.0000	1,631.7145	1,631.7145	0.0498	0.0296	1,641.7757
Mobile	2.2379	4.5093	24.5307	0.0760	9.5987	0.0546	9.6533	2.5607	0.0510	2.6117	0.0000	7,440.7074	7,440.7074	0.2561	0.3515	7,551.8569
Waste						0.0000	0.0000		0.0000	0.0000	127.6022	0.0000	127.6022	7.5411	0.0000	316.1289
Water						0.0000	0.0000		0.0000	0.0000	23.8619	34.6908	58.5526	2.4566	0.0584	137.3749
Total	**11.8741**	**6.0346**	**44.6749**	**0.0853**	**9.5987**	**0.2686**	**9.8673**	**2.5607**	**0.2650**	**2.8257**	**151.4640**	**9,139.1993**	**9,290.6633**	**10.3341**	**0.4395**	**9,679.9875**

	ROG	NOx	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	**0.59**	**9.67**	**6.56**	**15.57**	**17.75**	**3.69**	**17.43**	**17.75**	**3.51**	**16.60**	**46.86**	**17.51**	**18.25**	**44.36**	**14.37**	**19.21**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2023	5/31/2023	5	108	
2	Site Preparation	Site Preparation	2/1/2023	6/30/2023	5	108	
3	Grading	Grading	7/3/2023	12/29/2023	5	130	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	1/1/2024	11/30/2029	5	1545	
5	Architectural Coating	Architectural Coating	3/1/2024	12/21/2029	5	1516	
6	Paving	Paving	2/1/2029	12/5/2029	5	220	

Acres of Grading (Site Preparation Phase): 162

Acres of Grading (Grading Phase): 390

Acres of Paving: 0

Residential Indoor: 4,271,535; Residential Outdoor: 1,423,845; 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
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	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
Demolition	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	739.00	154.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	148.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

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 Demolition - 2023

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	0.1225	1.1602	1.0607	2.1000e-003		0.0539	0.0539		0.0501	0.0501	0.0000	183.5572	183.5572	0.0514	0.0000	184.8423
Total	**0.1225**	**1.1602**	**1.0607**	**2.1000e-003**		**0.0539**	**0.0539**		**0.0501**	**0.0501**	**0.0000**	**183.5572**	**183.5572**	**0.0514**	**0.0000**	**184.8423**

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	2.5800e-003	1.8800e-003	0.0214	7.0000e-005	7.8000e-003	4.0000e-005	7.8400e-003	2.0700e-003	4.0000e-005	2.1100e-003	0.0000	6.0591	6.0591	1.7000e-004	1.7000e-004	6.1145
Total	**2.5800e-003**	**1.8800e-003**	**0.0214**	**7.0000e-005**	**7.8000e-003**	**4.0000e-005**	**7.8400e-003**	**2.0700e-003**	**4.0000e-005**	**2.1100e-003**	**0.0000**	**6.0591**	**6.0591**	**1.7000e-004**	**1.7000e-004**	**6.1145**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

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	0.0499	0.9889	1.3324	2.1000e-003		0.0466	0.0466		0.0466	0.0466	0.0000	183.5569	183.5569	0.0514	0.0000	184.8421
Total	**0.0499**	**0.9889**	**1.3324**	**2.1000e-003**		**0.0466**	**0.0466**		**0.0466**	**0.0466**	**0.0000**	**183.5569**	**183.5569**	**0.0514**	**0.0000**	**184.8421**

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	2.5800e-003	1.8800e-003	0.0214	7.0000e-005	7.8000e-003	4.0000e-005	7.8400e-003	2.0700e-003	4.0000e-005	2.1100e-003	0.0000	6.0591	6.0591	1.7000e-004	1.7000e-004	6.1145
Total	**2.5800e-003**	**1.8800e-003**	**0.0214**	**7.0000e-005**	**7.8000e-003**	**4.0000e-005**	**7.8400e-003**	**2.0700e-003**	**4.0000e-005**	**2.1100e-003**	**0.0000**	**6.0591**	**6.0591**	**1.7000e-004**	**1.7000e-004**	**6.1145**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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					1.0615	0.0000	1.0615	0.5455	0.0000	0.5455	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1436	1.4863	0.9852	2.0600e-003		0.0684	0.0684		0.0629	0.0629	0.0000	180.6338	180.6338	0.0584	0.0000	182.0943
Total	**0.1436**	**1.4863**	**0.9852**	**2.0600e-003**	**1.0615**	**0.0684**	**1.1299**	**0.5455**	**0.0629**	**0.6084**	**0.0000**	**180.6338**	**180.6338**	**0.0584**	**0.0000**	**182.0943**

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-003	2.2600e-003	0.0257	8.0000e-005	9.3600e-003	5.0000e-005	9.4000e-003	2.4900e-003	4.0000e-005	2.5300e-003	0.0000	7.2710	7.2710	2.0000e-004	2.1000e-004	7.3374
Total	**3.1000e-003**	**2.2600e-003**	**0.0257**	**8.0000e-005**	**9.3600e-003**	**5.0000e-005**	**9.4000e-003**	**2.4900e-003**	**4.0000e-005**	**2.5300e-003**	**0.0000**	**7.2710**	**7.2710**	**2.0000e-004**	**2.1000e-004**	**7.3374**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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					0.4140	0.0000	0.4140	0.2128	0.0000	0.2128	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0503	1.0295	1.2398	2.0600e-003		0.0511	0.0511		0.0511	0.0511	0.0000	180.6336	180.6336	0.0584	0.0000	182.0941
Total	**0.0503**	**1.0295**	**1.2398**	**2.0600e-003**	**0.4140**	**0.0511**	**0.4651**	**0.2128**	**0.0511**	**0.2639**	**0.0000**	**180.6336**	**180.6336**	**0.0584**	**0.0000**	**182.0941**

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-003	2.2600e-003	0.0257	8.0000e-005	9.3600e-003	5.0000e-005	9.4000e-003	2.4900e-003	4.0000e-005	2.5300e-003	0.0000	7.2710	7.2710	2.0000e-004	2.1000e-004	7.3374
Total	**3.1000e-003**	**2.2600e-003**	**0.0257**	**8.0000e-005**	**9.3600e-003**	**5.0000e-005**	**9.4000e-003**	**2.4900e-003**	**4.0000e-005**	**2.5300e-003**	**0.0000**	**7.2710**	**7.2710**	**2.0000e-004**	**2.1000e-004**	**7.3374**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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					0.5982	0.0000	0.5982	0.2375	0.0000	0.2375	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2159	2.2435	1.8233	4.0400e-003		0.0926	0.0926		0.0852	0.0852	0.0000	354.4789	354.4789	0.1147	0.0000	357.3450
Total	**0.2159**	**2.2435**	**1.8233**	**4.0400e-003**	**0.5982**	**0.0926**	**0.6908**	**0.2375**	**0.0852**	**0.3227**	**0.0000**	**354.4789**	**354.4789**	**0.1147**	**0.0000**	**357.3450**

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	4.1400e-003	3.0200e-003	0.0344	1.0000e-004	0.0125	6.0000e-005	0.0126	3.3300e-003	6.0000e-005	3.3800e-003	0.0000	9.7245	9.7245	2.7000e-004	2.8000e-004	9.8134
Total	**4.1400e-003**	**3.0200e-003**	**0.0344**	**1.0000e-004**	**0.0125**	**6.0000e-005**	**0.0126**	**3.3300e-003**	**6.0000e-005**	**3.3800e-003**	**0.0000**	**9.7245**	**9.7245**	**2.7000e-004**	**2.8000e-004**	**9.8134**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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					0.2333	0.0000	0.2333	0.0926	0.0000	0.0926	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0990	1.9486	2.3870	4.0400e-003		0.0845	0.0845		0.0845	0.0845	0.0000	354.4784	354.4784	0.1147	0.0000	357.3446
Total	**0.0990**	**1.9486**	**2.3870**	**4.0400e-003**	**0.2333**	**0.0845**	**0.3178**	**0.0926**	**0.0845**	**0.1771**	**0.0000**	**354.4784**	**354.4784**	**0.1147**	**0.0000**	**357.3446**

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	4.1400e-003	3.0200e-003	0.0344	1.0000e-004	0.0125	6.0000e-005	0.0126	3.3300e-003	6.0000e-005	3.3800e-003	0.0000	9.7245	9.7245	2.7000e-004	2.8000e-004	9.8134
Total	**4.1400e-003**	**3.0200e-003**	**0.0344**	**1.0000e-004**	**0.0125**	**6.0000e-005**	**0.0126**	**3.3300e-003**	**6.0000e-005**	**3.3800e-003**	**0.0000**	**9.7245**	**9.7245**	**2.7000e-004**	**2.8000e-004**	**9.8134**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

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	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179
Total	**0.1928**	**1.7611**	**2.1179**	**3.5300e-003**		**0.0803**	**0.0803**		**0.0756**	**0.0756**	**0.0000**	**303.7223**	**303.7223**	**0.0718**	**0.0000**	**305.5179**

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	0.0228	0.8178	0.2624	2.9500e-003	0.0917	4.6500e-003	0.0964	0.0265	4.4400e-003	0.0310	0.0000	286.5800	286.5800	6.5400e-003	0.0421	299.2845
Worker	0.2905	0.2002	2.3863	7.5500e-003	0.9320	4.3600e-003	0.9364	0.2477	4.0200e-003	0.2517	0.0000	707.0365	707.0365	0.0182	0.0191	713.1799
Total	**0.3133**	**1.0181**	**2.6486**	**0.0105**	**1.0237**	**9.0100e-003**	**1.0327**	**0.2742**	**8.4600e-003**	**0.2827**	**0.0000**	**993.6165**	**993.6165**	**0.0247**	**0.0612**	**1,012.4644**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

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	0.0883	1.8636	2.3415	3.5300e-003		0.1184	0.1184		0.1184	0.1184	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175
Total	**0.0883**	**1.8636**	**2.3415**	**3.5300e-003**		**0.1184**	**0.1184**		**0.1184**	**0.1184**	**0.0000**	**303.7220**	**303.7220**	**0.0718**	**0.0000**	**305.5175**

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	0.0228	0.8178	0.2624	2.9500e-003	0.0917	4.6500e-003	0.0964	0.0265	4.4400e-003	0.0310	0.0000	286.5800	286.5800	6.5400e-003	0.0421	299.2845
Worker	0.2905	0.2002	2.3863	7.5500e-003	0.9320	4.3600e-003	0.9364	0.2477	4.0200e-003	0.2517	0.0000	707.0365	707.0365	0.0182	0.0191	713.1799
Total	**0.3133**	**1.0181**	**2.6486**	**0.0105**	**1.0237**	**9.0100e-003**	**1.0327**	**0.2742**	**8.4600e-003**	**0.2827**	**0.0000**	**993.6165**	**993.6165**	**0.0247**	**0.0612**	**1,012.4644**

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	0.0220	0.7974	0.2574	2.8800e-003	0.0914	4.5200e-003	0.0959	0.0264	4.3200e-003	0.0307	0.0000	280.5426	280.5426	6.6200e-003	0.0412	292.9752
Worker	0.2737	0.1792	2.2259	7.2800e-003	0.9284	4.1500e-003	0.9326	0.2467	3.8200e-003	0.2506	0.0000	688.2045	688.2045	0.0165	0.0178	693.9132
Total	**0.2957**	**0.9766**	**2.4832**	**0.0102**	**1.0198**	**8.6700e-003**	**1.0285**	**0.2731**	**8.1400e-003**	**0.2813**	**0.0000**	**968.7471**	**968.7471**	**0.0231**	**0.0589**	**986.8883**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

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	0.0879	1.8565	2.3325	3.5200e-003		0.1179	0.1179		0.1179	0.1179	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.0879**	**1.8565**	**2.3325**	**3.5200e-003**		**0.1179**	**0.1179**		**0.1179**	**0.1179**	**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	0.0220	0.7974	0.2574	2.8800e-003	0.0914	4.5200e-003	0.0959	0.0264	4.3200e-003	0.0307	0.0000	280.5426	280.5426	6.6200e-003	0.0412	292.9752
Worker	0.2737	0.1792	2.2259	7.2800e-003	0.9284	4.1500e-003	0.9326	0.2467	3.8200e-003	0.2506	0.0000	688.2045	688.2045	0.0165	0.0178	693.9132
Total	**0.2957**	**0.9766**	**2.4832**	**0.0102**	**1.0198**	**8.6700e-003**	**1.0285**	**0.2731**	**8.1400e-003**	**0.2813**	**0.0000**	**968.7471**	**968.7471**	**0.0231**	**0.0589**	**986.8883**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	0.1785	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	0.0213	0.7801	0.2543	2.8300e-003	0.0914	4.4000e-003	0.0958	0.0264	4.2100e-003	0.0306	0.0000	275.5144	275.5144	6.7200e-003	0.0404	287.7202
Worker	0.2600	0.1624	2.0977	7.0600e-003	0.9284	3.9500e-003	0.9324	0.2467	3.6400e-003	0.2504	0.0000	672.6959	672.6959	0.0151	0.0167	678.0591
Total	**0.2813**	**0.9425**	**2.3520**	**9.8900e-003**	**1.0199**	**8.3500e-003**	**1.0282**	**0.2732**	**7.8500e-003**	**0.2810**	**0.0000**	**948.2103**	**948.2103**	**0.0218**	**0.0571**	**965.7793**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	0.0879	1.8565	2.3325	3.5200e-003		0.1179	0.1179		0.1179	0.1179	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.0879**	**1.8565**	**2.3325**	**3.5200e-003**		**0.1179**	**0.1179**		**0.1179**	**0.1179**	**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	0.0213	0.7801	0.2543	2.8300e-003	0.0914	4.4000e-003	0.0958	0.0264	4.2100e-003	0.0306	0.0000	275.5144	275.5144	6.7200e-003	0.0404	287.7202
Worker	0.2600	0.1624	2.0977	7.0600e-003	0.9284	3.9500e-003	0.9324	0.2467	3.6400e-003	0.2504	0.0000	672.6959	672.6959	0.0151	0.0167	678.0591
Total	**0.2813**	**0.9425**	**2.3520**	**9.8900e-003**	**1.0199**	**8.3500e-003**	**1.0282**	**0.2732**	**7.8500e-003**	**0.2810**	**0.0000**	**948.2103**	**948.2103**	**0.0218**	**0.0571**	**965.7793**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2027

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	0.0208	0.7638	0.2519	2.7700e-003	0.0914	4.2900e-003	0.0957	0.0264	4.1000e-003	0.0305	0.0000	270.0893	270.0893	6.8000e-003	0.0396	282.0538
Worker	0.2472	0.1481	1.9872	6.8600e-003	0.9284	3.7300e-003	0.9322	0.2467	3.4300e-003	0.2502	0.0000	658.2704	658.2704	0.0139	0.0159	663.3397
Total	**0.2679**	**0.9119**	**2.2391**	**9.6300e-003**	**1.0199**	**8.0200e-003**	**1.0279**	**0.2732**	**7.5300e-003**	**0.2807**	**0.0000**	**928.3597**	**928.3597**	**0.0207**	**0.0554**	**945.3935**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2027

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	0.0879	1.8565	2.3325	3.5200e-003		0.1179	0.1179		0.1179	0.1179	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.0879**	**1.8565**	**2.3325**	**3.5200e-003**		**0.1179**	**0.1179**		**0.1179**	**0.1179**	**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	0.0208	0.7638	0.2519	2.7700e-003	0.0914	4.2900e-003	0.0957	0.0264	4.1000e-003	0.0305	0.0000	270.0893	270.0893	6.8000e-003	0.0396	282.0538
Worker	0.2472	0.1481	1.9872	6.8600e-003	0.9284	3.7300e-003	0.9322	0.2467	3.4300e-003	0.2502	0.0000	658.2704	658.2704	0.0139	0.0159	663.3397
Total	**0.2679**	**0.9119**	**2.2391**	**9.6300e-003**	**1.0199**	**8.0200e-003**	**1.0279**	**0.2732**	**7.5300e-003**	**0.2807**	**0.0000**	**928.3597**	**928.3597**	**0.0207**	**0.0554**	**945.3935**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2028

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	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671
Total	**0.1778**	**1.6211**	**2.0910**	**3.5000e-003**		**0.0686**	**0.0686**		**0.0645**	**0.0645**	**0.0000**	**301.4953**	**301.4953**	**0.0709**	**0.0000**	**303.2671**

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	0.0202	0.7468	0.2491	2.7000e-003	0.0911	4.1700e-003	0.0952	0.0263	3.9800e-003	0.0303	0.0000	263.8953	263.8953	6.8800e-003	0.0387	275.5841
Worker	0.2337	0.1355	1.8870	6.6400e-003	0.9249	3.4800e-003	0.9284	0.2458	3.2100e-003	0.2490	0.0000	642.7503	642.7503	0.0128	0.0150	647.5518
Total	**0.2539**	**0.8824**	**2.1361**	**9.3400e-003**	**1.0160**	**7.6500e-003**	**1.0236**	**0.2721**	**7.1900e-003**	**0.2793**	**0.0000**	**906.6456**	**906.6456**	**0.0196**	**0.0537**	**923.1359**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2028

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	0.0876	1.8494	2.3236	3.5000e-003		0.1175	0.1175		0.1175	0.1175	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667
Total	**0.0876**	**1.8494**	**2.3236**	**3.5000e-003**		**0.1175**	**0.1175**		**0.1175**	**0.1175**	**0.0000**	**301.4949**	**301.4949**	**0.0709**	**0.0000**	**303.2667**

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	0.0202	0.7468	0.2491	2.7000e-003	0.0911	4.1700e-003	0.0952	0.0263	3.9800e-003	0.0303	0.0000	263.8953	263.8953	6.8800e-003	0.0387	275.5841
Worker	0.2337	0.1355	1.8870	6.6400e-003	0.9249	3.4800e-003	0.9284	0.2458	3.2100e-003	0.2490	0.0000	642.7503	642.7503	0.0128	0.0150	647.5518
Total	**0.2539**	**0.8824**	**2.1361**	**9.3400e-003**	**1.0160**	**7.6500e-003**	**1.0236**	**0.2721**	**7.1900e-003**	**0.2793**	**0.0000**	**906.6456**	**906.6456**	**0.0196**	**0.0537**	**923.1359**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2029

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	0.1641	1.4964	1.9302	3.2400e-003		0.0633	0.0633		0.0596	0.0596	0.0000	278.3033	278.3033	0.0654	0.0000	279.9389
Total	**0.1641**	**1.4964**	**1.9302**	**3.2400e-003**		**0.0633**	**0.0633**		**0.0596**	**0.0596**	**0.0000**	**278.3033**	**278.3033**	**0.0654**	**0.0000**	**279.9389**

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	0.0181	0.6760	0.2284	2.4400e-003	0.0841	3.7400e-003	0.0878	0.0243	3.5800e-003	0.0279	0.0000	238.7618	238.7618	6.4400e-003	0.0349	249.3362
Worker	0.2044	0.1157	1.6668	5.9800e-003	0.8537	3.0200e-003	0.8568	0.2269	2.7800e-003	0.2297	0.0000	582.3984	582.3984	0.0109	0.0133	586.6344
Total	**0.2226**	**0.7917**	**1.8952**	**8.4200e-003**	**0.9378**	**6.7600e-003**	**0.9446**	**0.2512**	**6.3600e-003**	**0.2575**	**0.0000**	**821.1602**	**821.1602**	**0.0173**	**0.0482**	**835.9706**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2029

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	0.0809	1.7071	2.1449	3.2400e-003		0.1084	0.1084		0.1084	0.1084	0.0000	278.3030	278.3030	0.0654	0.0000	279.9385
Total	**0.0809**	**1.7071**	**2.1449**	**3.2400e-003**		**0.1084**	**0.1084**		**0.1084**	**0.1084**	**0.0000**	**278.3030**	**278.3030**	**0.0654**	**0.0000**	**279.9385**

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	0.0181	0.6760	0.2284	2.4400e-003	0.0841	3.7400e-003	0.0878	0.0243	3.5800e-003	0.0279	0.0000	238.7618	238.7618	6.4400e-003	0.0349	249.3362
Worker	0.2044	0.1157	1.6668	5.9800e-003	0.8537	3.0200e-003	0.8568	0.2269	2.7800e-003	0.2297	0.0000	582.3984	582.3984	0.0109	0.0133	586.6344
Total	**0.2226**	**0.7917**	**1.8952**	**8.4200e-003**	**0.9378**	**6.7600e-003**	**0.9446**	**0.2512**	**6.3600e-003**	**0.2575**	**0.0000**	**821.1602**	**821.1602**	**0.0173**	**0.0482**	**835.9706**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

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	4.7450					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0197	0.1329	0.1973	3.2000e-004		6.6400e-003	6.6400e-003		6.6400e-003	6.6400e-003	0.0000	27.8305	27.8305	1.5700e-003	0.0000	27.8696
Total	**4.7647**	**0.1329**	**0.1973**	**3.2000e-004**		**6.6400e-003**	**6.6400e-003**		**6.6400e-003**	**6.6400e-003**	**0.0000**	**27.8305**	**27.8305**	**1.5700e-003**	**0.0000**	**27.8696**

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	0.0484	0.0334	0.3976	1.2600e-003	0.1553	7.3000e-004	0.1560	0.0413	6.7000e-004	0.0419	0.0000	117.8187	117.8187	3.0300e-003	3.1800e-003	118.8425
Total	**0.0484**	**0.0334**	**0.3976**	**1.2600e-003**	**0.1553**	**7.3000e-004**	**0.1560**	**0.0413**	**6.7000e-004**	**0.0419**	**0.0000**	**117.8187**	**117.8187**	**3.0300e-003**	**3.1800e-003**	**118.8425**

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	4.7450					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4800e-003	0.1479	0.1997	3.2000e-004		0.0104	0.0104		0.0104	0.0104	0.0000	27.8304	27.8304	1.5700e-003	0.0000	27.8696
Total	**4.7515**	**0.1479**	**0.1997**	**3.2000e-004**		**0.0104**	**0.0104**		**0.0104**	**0.0104**	**0.0000**	**27.8304**	**27.8304**	**1.5700e-003**	**0.0000**	**27.8696**

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	0.0484	0.0334	0.3976	1.2600e-003	0.1553	7.3000e-004	0.1560	0.0413	6.7000e-004	0.0419	0.0000	117.8187	117.8187	3.0300e-003	3.1800e-003	118.8425
Total	**0.0484**	**0.0334**	**0.3976**	**1.2600e-003**	**0.1553**	**7.3000e-004**	**0.1560**	**0.0413**	**6.7000e-004**	**0.0419**	**0.0000**	**117.8187**	**117.8187**	**3.0300e-003**	**3.1800e-003**	**118.8425**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

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	5.6810					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	**5.7033**	**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	0.0548	0.0359	0.4458	1.4600e-003	0.1859	8.3000e-004	0.1868	0.0494	7.7000e-004	0.0502	0.0000	137.8272	137.8272	3.3000e-003	3.5600e-003	138.9704
Total	**0.0548**	**0.0359**	**0.4458**	**1.4600e-003**	**0.1859**	**8.3000e-004**	**0.1868**	**0.0494**	**7.7000e-004**	**0.0502**	**0.0000**	**137.8272**	**137.8272**	**3.3000e-003**	**3.5600e-003**	**138.9704**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

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	5.6810					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**5.6888**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**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	0.0548	0.0359	0.4458	1.4600e-003	0.1859	8.3000e-004	0.1868	0.0494	7.7000e-004	0.0502	0.0000	137.8272	137.8272	3.3000e-003	3.5600e-003	138.9704
Total	**0.0548**	**0.0359**	**0.4458**	**1.4600e-003**	**0.1859**	**8.3000e-004**	**0.1868**	**0.0494**	**7.7000e-004**	**0.0502**	**0.0000**	**137.8272**	**137.8272**	**3.3000e-003**	**3.5600e-003**	**138.9704**

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	5.6810					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	**5.7033**	**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	0.0521	0.0325	0.4201	1.4100e-003	0.1859	7.9000e-004	0.1867	0.0494	7.3000e-004	0.0501	0.0000	134.7212	134.7212	3.0200e-003	3.3500e-003	135.7953
Total	**0.0521**	**0.0325**	**0.4201**	**1.4100e-003**	**0.1859**	**7.9000e-004**	**0.1867**	**0.0494**	**7.3000e-004**	**0.0501**	**0.0000**	**134.7212**	**134.7212**	**3.0200e-003**	**3.3500e-003**	**135.7953**

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	5.6810					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**5.6888**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**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	0.0521	0.0325	0.4201	1.4100e-003	0.1859	7.9000e-004	0.1867	0.0494	7.3000e-004	0.0501	0.0000	134.7212	134.7212	3.0200e-003	3.3500e-003	135.7953
Total	**0.0521**	**0.0325**	**0.4201**	**1.4100e-003**	**0.1859**	**7.9000e-004**	**0.1867**	**0.0494**	**7.3000e-004**	**0.0501**	**0.0000**	**134.7212**	**134.7212**	**3.0200e-003**	**3.3500e-003**	**135.7953**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2027

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	5.6810					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	**5.7033**	**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	0.0495	0.0297	0.3980	1.3700e-003	0.1859	7.5000e-004	0.1867	0.0494	6.9000e-004	0.0501	0.0000	131.8322	131.8322	2.7800e-003	3.1700e-003	132.8475
Total	**0.0495**	**0.0297**	**0.3980**	**1.3700e-003**	**0.1859**	**7.5000e-004**	**0.1867**	**0.0494**	**6.9000e-004**	**0.0501**	**0.0000**	**131.8322**	**131.8322**	**2.7800e-003**	**3.1700e-003**	**132.8475**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2027

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	5.6810					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**5.6888**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**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	0.0495	0.0297	0.3980	1.3700e-003	0.1859	7.5000e-004	0.1867	0.0494	6.9000e-004	0.0501	0.0000	131.8322	131.8322	2.7800e-003	3.1700e-003	132.8475
Total	**0.0495**	**0.0297**	**0.3980**	**1.3700e-003**	**0.1859**	**7.5000e-004**	**0.1867**	**0.0494**	**6.9000e-004**	**0.0501**	**0.0000**	**131.8322**	**131.8322**	**2.7800e-003**	**3.1700e-003**	**132.8475**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

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	5.6592					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0222	0.1489	0.2352	3.9000e-004		6.7000e-003	6.7000e-003		6.7000e-003	6.7000e-003	0.0000	33.1923	33.1923	1.8100e-003	0.0000	33.2376
Total	**5.6814**	**0.1489**	**0.2352**	**3.9000e-004**		**6.7000e-003**	**6.7000e-003**		**6.7000e-003**	**6.7000e-003**	**0.0000**	**33.1923**	**33.1923**	**1.8100e-003**	**0.0000**	**33.2376**

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	0.0468	0.0272	0.3779	1.3300e-003	0.1852	7.0000e-004	0.1859	0.0492	6.4000e-004	0.0499	0.0000	128.7240	128.7240	2.5500e-003	3.0100e-003	129.6856
Total	**0.0468**	**0.0272**	**0.3779**	**1.3300e-003**	**0.1852**	**7.0000e-004**	**0.1859**	**0.0492**	**6.4000e-004**	**0.0499**	**0.0000**	**128.7240**	**128.7240**	**2.5500e-003**	**3.0100e-003**	**129.6856**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

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	5.6592					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7300e-003	0.1764	0.2382	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.1923	33.1923	1.8100e-003	0.0000	33.2375
Total	**5.6670**	**0.1764**	**0.2382**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.1923**	**33.1923**	**1.8100e-003**	**0.0000**	**33.2375**

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	0.0468	0.0272	0.3779	1.3300e-003	0.1852	7.0000e-004	0.1859	0.0492	6.4000e-004	0.0499	0.0000	128.7240	128.7240	2.5500e-003	3.0100e-003	129.6856
Total	**0.0468**	**0.0272**	**0.3779**	**1.3300e-003**	**0.1852**	**7.0000e-004**	**0.1859**	**0.0492**	**6.4000e-004**	**0.0499**	**0.0000**	**128.7240**	**128.7240**	**2.5500e-003**	**3.0100e-003**	**129.6856**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

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	5.5504					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0218	0.1461	0.2307	3.8000e-004		6.5700e-003	6.5700e-003		6.5700e-003	6.5700e-003	0.0000	32.5540	32.5540	1.7800e-003	0.0000	32.5984
Total	**5.5722**	**0.1461**	**0.2307**	**3.8000e-004**		**6.5700e-003**	**6.5700e-003**		**6.5700e-003**	**6.5700e-003**	**0.0000**	**32.5540**	**32.5540**	**1.7800e-003**	**0.0000**	**32.5984**

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	0.0435	0.0246	0.3547	1.2700e-003	0.1817	6.4000e-004	0.1823	0.0483	5.9000e-004	0.0489	0.0000	123.9271	123.9271	2.3200e-003	2.8300e-003	124.8285
Total	**0.0435**	**0.0246**	**0.3547**	**1.2700e-003**	**0.1817**	**6.4000e-004**	**0.1823**	**0.0483**	**5.9000e-004**	**0.0489**	**0.0000**	**123.9271**	**123.9271**	**2.3200e-003**	**2.8300e-003**	**124.8285**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

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	5.5504					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5800e-003	0.1730	0.2336	3.8000e-004		0.0121	0.0121		0.0121	0.0121	0.0000	32.5540	32.5540	1.7800e-003	0.0000	32.5983
Total	**5.5580**	**0.1730**	**0.2336**	**3.8000e-004**		**0.0121**	**0.0121**		**0.0121**	**0.0121**	**0.0000**	**32.5540**	**32.5540**	**1.7800e-003**	**0.0000**	**32.5983**

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	0.0435	0.0246	0.3547	1.2700e-003	0.1817	6.4000e-004	0.1823	0.0483	5.9000e-004	0.0489	0.0000	123.9271	123.9271	2.3200e-003	2.8300e-003	124.8285
Total	**0.0435**	**0.0246**	**0.3547**	**1.2700e-003**	**0.1817**	**6.4000e-004**	**0.1823**	**0.0483**	**5.9000e-004**	**0.0489**	**0.0000**	**123.9271**	**123.9271**	**2.3200e-003**	**2.8300e-003**	**124.8285**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2029

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	0.1007	0.9440	1.6036	2.5100e-003		0.0460	0.0460		0.0424	0.0424	0.0000	220.2118	220.2118	0.0712	0.0000	221.9923
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1007**	**0.9440**	**1.6036**	**2.5100e-003**		**0.0460**	**0.0460**		**0.0424**	**0.0424**	**0.0000**	**220.2118**	**220.2118**	**0.0712**	**0.0000**	**221.9923**

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	3.8000e-003	2.1500e-003	0.0310	1.1000e-004	0.0159	6.0000e-005	0.0159	4.2200e-003	5.0000e-005	4.2700e-003	0.0000	10.8362	10.8362	2.0000e-004	2.5000e-004	10.9151
Total	**3.8000e-003**	**2.1500e-003**	**0.0310**	**1.1000e-004**	**0.0159**	**6.0000e-005**	**0.0159**	**4.2200e-003**	**5.0000e-005**	**4.2700e-003**	**0.0000**	**10.8362**	**10.8362**	**2.0000e-004**	**2.5000e-004**	**10.9151**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2029

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	0.0617	1.2425	1.9025	2.5100e-003		0.0670	0.0670		0.0670	0.0670	0.0000	220.2116	220.2116	0.0712	0.0000	221.9921
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0617**	**1.2425**	**1.9025**	**2.5100e-003**		**0.0670**	**0.0670**		**0.0670**	**0.0670**	**0.0000**	**220.2116**	**220.2116**	**0.0712**	**0.0000**	**221.9921**

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	3.8000e-003	2.1500e-003	0.0310	1.1000e-004	0.0159	6.0000e-005	0.0159	4.2200e-003	5.0000e-005	4.2700e-003	0.0000	10.8362	10.8362	2.0000e-004	2.5000e-004	10.9151
Total	**3.8000e-003**	**2.1500e-003**	**0.0310**	**1.1000e-004**	**0.0159**	**6.0000e-005**	**0.0159**	**4.2200e-003**	**5.0000e-005**	**4.2700e-003**	**0.0000**	**10.8362**	**10.8362**	**2.0000e-004**	**2.5000e-004**	**10.9151**

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 Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Integrate Below Market Rate Housing

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	2.2379	4.5093	24.5307	0.0760	9.5987	0.0546	9.6533	2.5607	0.0510	2.6117	0.0000	7,440.7074	7,440.7074	0.2561	0.3515	7,551.8569
Unmitigated	2.3087	5.1552	27.6682	0.0917	11.6708	0.0649	11.7356	3.1135	0.0606	3.1741	0.0000	8,981.9570	8,981.9570	0.2753	0.4045	9,109.3782

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	4,575.00	4,965.40	3836.90	11,859,256	9,753,755
Single Family Housing	7,313.74	7,946.82	7322.07	19,406,808	15,961,308
Total	11,888.74	12,912.22	11,158.97	31,266,064	25,715,062

4.3 Trip Type Information

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	90	6	4
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	90	6	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000
Single Family Housing	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

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	126.7612	126.7612	0.0210	1.9900e-003	127.8793
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	518.9554	518.9554	0.0858	8.1700e-003	523.5329
NaturalGas Mitigated	0.1521	1.2995	0.5530	8.2900e-003		0.1051	0.1051		0.1051	0.1051	0.0000	1,504.9532	1,504.9532	0.0288	0.0276	1,513.8964
NaturalGas Unmitigated	0.1521	1.2995	0.5530	8.2900e-003		0.1051	0.1051		0.1051	0.1051	0.0000	1,504.9532	1,504.9532	0.0288	0.0276	1,513.8964

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	6.01935e+006	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224	0.0000	321.2155	321.2155	6.1600e-003	5.8900e-003	323.1244
Single Family Housing	2.21824e+007	0.1196	1.0221	0.4350	6.5200e-003		0.0826	0.0826		0.0826	0.0826	0.0000	1,183.7377	1,183.7377	0.0227	0.0217	1,190.7721
Total		**0.1521**	**1.2995**	**0.5530**	**8.2900e-003**		**0.1051**	**0.1051**		**0.1051**	**0.1051**	**0.0000**	**1,504.9532**	**1,504.9532**	**0.0289**	**0.0276**	**1,513.8964**

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					
Apartments Low Rise	6.01935e+006	0.0325	0.2774	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224	0.0000	321.2155	321.2155	6.1600e-003	5.8900e-003	323.1244
Single Family Housing	2.21824e+007	0.1196	1.0221	0.4350	6.5200e-003		0.0826	0.0826		0.0826	0.0826	0.0000	1,183.7377	1,183.7377	0.0227	0.0217	1,190.7721
Total		**0.1521**	**1.2995**	**0.5530**	**8.2900e-003**		**0.1051**	**0.1051**		**0.1051**	**0.1051**	**0.0000**	**1,504.9532**	**1,504.9532**	**0.0289**	**0.0276**	**1,513.8964**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.47722e+006	142.8042	0.0236	2.2500e-003	144.0638
Single Family Housing	6.52507e+006	376.1512	0.0622	5.9200e-003	379.4690
Total		**518.9554**	**0.0858**	**8.1700e-003**	**523.5329**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	602660	34.7416	5.7400e-003	5.5000e-004	35.0480
Single Family Housing	1.59626e+006	92.0196	0.0152	1.4500e-003	92.8313
Total		**126.7612**	**0.0210**	**2.0000e-003**	**127.8793**

6.0 Area Detail

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

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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					
Mitigated	9.4842	0.2259	19.5912	1.0400e-003		0.1089	0.1089		0.1089	0.1089	0.0000	32.0867	32.0867	0.0306	0.0000	32.8510
Unmitigated	9.4842	0.2259	19.5912	1.0400e-003		0.1089	0.1089		0.1089	0.1089	0.0000	32.0867	32.0867	0.0306	0.0000	32.8510

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	0.6600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.2383					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	0.5860	0.2259	19.5912	1.0400e-003		0.1089	0.1089		0.1089	0.1089	0.0000	32.0867	32.0867	0.0306	0.0000	32.8510
Total	**9.4842**	**0.2259**	**19.5912**	**1.0400e-003**		**0.1089**	**0.1089**		**0.1089**	**0.1089**	**0.0000**	**32.0867**	**32.0867**	**0.0306**	**0.0000**	**32.8510**

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	0.6600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.2383					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	0.5860	0.2259	19.5912	1.0400e-003		0.1089	0.1089		0.1089	0.1089	0.0000	32.0867	32.0867	0.0306	0.0000	32.8510
Total	**9.4842**	**0.2259**	**19.5912**	**1.0400e-003**		**0.1089**	**0.1089**		**0.1089**	**0.1089**	**0.0000**	**32.0867**	**32.0867**	**0.0306**	**0.0000**	**32.8510**

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	58.5526	2.4566	0.0584	137.3749
Unmitigated	71.1129	3.0704	0.0730	169.6224

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	39.744 / 25.056	30.0616	1.2979	0.0309	71.7046
Single Family Housing	54.2733 / 34.2158	41.0513	1.7724	0.0421	97.9179
Total		**71.1129**	**3.0704**	**0.0730**	**169.6224**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	31.7952 / 23.5276	24.7520	1.0385	0.0247	58.0725
Single Family Housing	43.4186 / 32.1286	33.8007	1.4181	0.0337	79.3023
Total		**58.5526**	**2.4566**	**0.0584**	**137.3749**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Annual

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	127.6022	7.5411	0.0000	316.1289
Unmitigated	255.2043	15.0821	0.0000	632.2579

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	280.6	56.9593	3.3662	0.0000	141.1142
Single Family Housing	976.62	198.2450	11.7160	0.0000	491.1437
Total		**255.2043**	**15.0822**	**0.0000**	**632.2579**

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	140.3	28.4796	1.6831	0.0000	70.5571
Single Family Housing	488.31	99.1225	5.8580	0.0000	245.5718
Total		**127.6022**	**7.5411**	**0.0000**	**316.1289**

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

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dana Reserve Residential 2030 operatioinal

San Luis Obispo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	610.00	Dwelling Unit	23.50	610,000.00	1745
Single Family Housing	833.00	Dwelling Unit	149.50	1,499,400.00	2382

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
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 - Utility Intensity Factor based on renewable portfolio standars for PG&E for the year of 2030.

Land Use - Apartment Low Rise land use also includes 152 accessory dwelling units (ADU's) as per the traffic report. Lot acreage based on specific plan.

Construction Phase - Construction phasing is based on the anticipated building schedule for Dana Reserve.

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Trips and VMT - defualts

Demolition - No structures are currently on the project site.

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading - Defualts

Vehicle Trips - Trip gen for Weekday and sunday is based on traffic report, sat was left default. Trip length was also left as default. Trip type was based on traffic report.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Use low VOC paint (50g/L)

Construction Off-road Equipment Mitigation - Soil stabilizers, Water exposed areas, and use tier 3 engines.

Mobile Land Use Mitigation - 75 Units will be affordable.

Area Mitigation - Use Low VOC Paints

Energy Mitigation - Based on average residential solar systems production and residential usage 75% of electicity generated will be from residential solar. Use energy efficient appliances.

Water Mitigation - Install low flow fixtures and irrigation.

Waste Mitigation -

Fleet Mix - Based on SJVAPCD Residential fleet mix for year 2030.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	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

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	220.00	1,516.00
tblConstructionPhase	NumDays	3,100.00	1,545.00
tblConstructionPhase	NumDays	200.00	108.00
tblConstructionPhase	NumDays	310.00	130.00
tblConstructionPhase	NumDays	120.00	108.00
tblFleetMix	HHD	5.9170e-003	0.02
tblFleetMix	HHD	5.9170e-003	0.02

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD2	7.7950e-003	1.0000e-003
tblFleetMix	LHD2	7.7950e-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	4.8140e-003	3.0000e-003
tblFleetMix	MH	4.8140e-003	3.0000e-003
tblFleetMix	MHD	8.3410e-003	7.4000e-003
tblFleetMix	MHD	8.3410e-003	7.4000e-003
tblFleetMix	OBUS	8.8500e-004	0.00
tblFleetMix	OBUS	8.8500e-004	0.00
tblFleetMix	SBUS	7.9200e-004	1.2000e-003
tblFleetMix	SBUS	7.9200e-004	1.2000e-003
tblFleetMix	UBUS	3.4600e-004	4.4000e-003
tblFleetMix	UBUS	3.4600e-004	4.4000e-003
tblLandUse	LotAcreage	38.13	23.50
tblLandUse	LotAcreage	270.45	149.50
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.021
tblProjectCharacteristics	CO2IntensityFactor	203.98	127.09
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.002

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	DV_TP	11.00	6.00
tblVehicleTrips	DV_TP	11.00	6.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PR_TP	86.00	90.00
tblVehicleTrips	PR_TP	86.00	90.00
tblVehicleTrips	SU_TR	6.28	6.29
tblVehicleTrips	SU_TR	8.55	8.79
tblVehicleTrips	WD_TR	7.32	7.50
tblVehicleTrips	WD_TR	9.44	8.78

2.0 Emissions Summary

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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					
2023	5.0328	49.0776	38.7874	0.0797	19.9833	2.2651	22.2484	10.1890	2.0942	12.2832	0.0000	7,716.2671	7,716.2671	2.2491	7.2000e-003	7,774.6395
2024	47.9967	22.3682	42.4279	0.1241	9.4846	0.7496	10.2342	2.5319	0.7085	3.2404	0.0000	12,646.0067	12,646.0067	0.8498	0.5335	12,826.2426
2025	47.7317	21.0241	40.8580	0.1214	9.4847	0.6518	10.1365	2.5319	0.6160	3.1479	0.0000	12,434.9050	12,434.9050	0.8310	0.5154	12,609.2653
2026	47.6001	20.7565	39.6058	0.1188	9.4848	0.6491	10.1338	2.5319	0.6134	3.1454	0.0000	12,229.0565	12,229.0565	0.8181	0.4991	12,398.2317
2027	47.4772	20.5168	38.5306	0.1165	9.4849	0.6461	10.1310	2.5320	0.6107	3.1426	0.0000	12,031.4015	12,031.4015	0.8069	0.4838	12,195.7557
2028	47.3577	20.3124	37.6289	0.1143	9.4849	0.6432	10.1281	2.5320	0.6080	3.1399	0.0000	11,850.4168	11,850.4168	0.7974	0.4702	12,010.4620
2029	48.1904	28.7188	51.7056	0.1361	9.6333	1.0594	10.6927	2.5713	0.9908	3.5622	0.0000	14,000.5575	14,000.5575	1.5047	0.4598	14,175.1866
Maximum	**48.1904**	**49.0776**	**51.7056**	**0.1361**	**19.9833**	**2.2651**	**22.2484**	**10.1890**	**2.0942**	**12.2832**	**0.0000**	**14,000.5575**	**14,000.5575**	**2.2491**	**0.5335**	**14,175.1866**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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)

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					
2023	1.9600	37.4476	48.5337	0.0797	7.9925	1.8105	9.8029	4.0265	1.8103	5.8368	0.0000	7,716.2671	7,716.2671	2.2491	7.2000e-003	7,774.6395
2024	47.0777	23.2887	44.1571	0.1241	9.4846	1.0740	10.5586	2.5319	1.0693	3.6012	0.0000	12,646.0067	12,646.0067	0.8498	0.5335	12,826.2426
2025	46.9268	22.9920	42.6704	0.1214	9.4847	1.0714	10.5561	2.5319	1.0669	3.5988	0.0000	12,434.9050	12,434.9050	0.8310	0.5154	12,609.2653
2026	46.7951	22.7244	41.4182	0.1188	9.4848	1.0686	10.5534	2.5319	1.0643	3.5962	0.0000	12,229.0565	12,229.0565	0.8181	0.4991	12,398.2317
2027	46.6723	22.4847	40.3430	0.1165	9.4849	1.0657	10.5505	2.5320	1.0615	3.5935	0.0000	12,031.4015	12,031.4015	0.8069	0.4838	12,195.7557
2028	46.5528	22.2802	39.4413	0.1143	9.4849	1.0628	10.5477	2.5320	1.0588	3.5908	0.0000	11,850.4168	11,850.4168	0.7974	0.4702	12,010.4620
2029	47.0313	33.4002	56.2357	0.1361	9.6333	1.6698	11.3031	2.5713	1.6660	4.2373	0.0000	14,000.5575	14,000.5575	1.5047	0.4598	14,175.1866
Maximum	**47.0777**	**37.4476**	**56.2357**	**0.1361**	**9.6333**	**1.8105**	**11.3031**	**4.0265**	**1.8103**	**5.8368**	**0.0000**	**14,000.5575**	**14,000.5575**	**2.2491**	**0.5335**	**14,175.1866**

	ROG	NOx	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	**2.87**	**-1.01**	**-8.03**	**0.00**	**15.56**	**-32.39**	**11.75**	**24.24**	**-40.95**	**11.39**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	52.3088	1.3688	118.7347	6.2900e-003		0.6602	0.6602		0.6602	0.6602	0.0000	214.3610	214.3610	0.2042	0.0000	219.4668
Energy	0.8333	7.1205	3.0300	0.0455		0.5757	0.5757		0.5757	0.5757		9,090.0109	9,090.0109	0.1742	0.1667	9,144.0283
Mobile	14.7737	29.0231	162.7543	0.5620	71.2526	0.3859	71.6385	18.9692	0.3605	19.3297		60,677.7593	60,677.7593	1.6958	2.5609	61,483.2989
Total	**67.9157**	**37.5124**	**284.5190**	**0.6137**	**71.2526**	**1.6218**	**72.8744**	**18.9692**	**1.5964**	**20.5656**	**0.0000**	**69,982.1312**	**69,982.1312**	**2.0743**	**2.7275**	**70,846.7940**

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	52.3088	1.3688	118.7347	6.2900e-003		0.6602	0.6602		0.6602	0.6602	0.0000	214.3610	214.3610	0.2042	0.0000	219.4668
Energy	0.8333	7.1205	3.0300	0.0455		0.5757	0.5757		0.5757	0.5757		9,090.0109	9,090.0109	0.1742	0.1667	9,144.0283
Mobile	14.3487	25.3791	142.7455	0.4654	58.6024	0.3246	58.9270	15.6014	0.3032	15.9046		50,251.3973	50,251.3973	1.5671	2.2227	50,952.9416
Total	**67.4907**	**33.8684**	**264.5102**	**0.5171**	**58.6024**	**1.5605**	**60.1629**	**15.6014**	**1.5391**	**17.1405**	**0.0000**	**59,555.7691**	**59,555.7691**	**1.9456**	**2.3894**	**60,316.4366**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	**0.63**	**9.71**	**7.03**	**15.74**	**17.75**	**3.78**	**17.44**	**17.75**	**3.59**	**16.65**	**0.00**	**14.90**	**14.90**	**6.20**	**12.40**	**14.86**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2023	5/31/2023	5	108	
2	Site Preparation	Site Preparation	2/1/2023	6/30/2023	5	108	
3	Grading	Grading	7/3/2023	12/29/2023	5	130	
4	Building Construction	Building Construction	1/1/2024	11/30/2029	5	1545	
5	Architectural Coating	Architectural Coating	3/1/2024	12/21/2029	5	1516	
6	Paving	Paving	2/1/2029	12/5/2029	5	220	

Acres of Grading (Site Preparation Phase): 162

Acres of Grading (Grading Phase): 390

Acres of Paving: 0

Residential Indoor: 4,271,535; Residential Outdoor: 1,423,845; 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
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	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

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

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
Demolition	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	739.00	154.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	148.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

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	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**		**0.9975**	**0.9975**		**0.9280**	**0.9280**		**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

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	0.0474	0.0314	0.4090	1.2500e-003	0.1483	7.1000e-004	0.1490	0.0393	6.6000e-004	0.0400		128.1704	128.1704	3.2500e-003	3.2700e-003	129.2270
Total	**0.0474**	**0.0314**	**0.4090**	**1.2500e-003**	**0.1483**	**7.1000e-004**	**0.1490**	**0.0393**	**6.6000e-004**	**0.0400**		**128.1704**	**128.1704**	**3.2500e-003**	**3.2700e-003**	**129.2270**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

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	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**0.9246**	**18.3130**	**24.6739**	**0.0388**		**0.8627**	**0.8627**		**0.8627**	**0.8627**	**0.0000**	**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

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	0.0474	0.0314	0.4090	1.2500e-003	0.1483	7.1000e-004	0.1490	0.0393	6.6000e-004	0.0400		128.1704	128.1704	3.2500e-003	3.2700e-003	129.2270
Total	**0.0474**	**0.0314**	**0.4090**	**1.2500e-003**	**0.1483**	**7.1000e-004**	**0.1490**	**0.0393**	**6.6000e-004**	**0.0400**		**128.1704**	**128.1704**	**3.2500e-003**	**3.2700e-003**	**129.2270**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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	0.0569	0.0376	0.4908	1.5000e-003	0.1780	8.5000e-004	0.1788	0.0472	7.9000e-004	0.0480		153.8045	153.8045	3.9000e-003	3.9300e-003	155.0724
Total	**0.0569**	**0.0376**	**0.4908**	**1.5000e-003**	**0.1780**	**8.5000e-004**	**0.1788**	**0.0472**	**7.9000e-004**	**0.0480**		**153.8045**	**153.8045**	**3.9000e-003**	**3.9300e-003**	**155.0724**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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	0.9312	19.0656	22.9600	0.0381		0.9462	0.9462		0.9462	0.9462	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**0.9312**	**19.0656**	**22.9600**	**0.0381**	**7.6662**	**0.9462**	**8.6124**	**3.9400**	**0.9462**	**4.8861**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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	0.0569	0.0376	0.4908	1.5000e-003	0.1780	8.5000e-004	0.1788	0.0472	7.9000e-004	0.0480		153.8045	153.8045	3.9000e-003	3.9300e-003	155.0724
Total	**0.0569**	**0.0376**	**0.4908**	**1.5000e-003**	**0.1780**	**8.5000e-004**	**0.1788**	**0.0472**	**7.9000e-004**	**0.0480**		**153.8045**	**153.8045**	**3.9000e-003**	**3.9300e-003**	**155.0724**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**9.2036**	**1.4245**	**10.6281**	**3.6538**	**1.3105**	**4.9643**		**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

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	0.0632	0.0418	0.5453	1.6700e-003	0.1977	9.5000e-004	0.1987	0.0524	8.7000e-004	0.0533		170.8939	170.8939	4.3300e-003	4.3600e-003	172.3027
Total	**0.0632**	**0.0418**	**0.5453**	**1.6700e-003**	**0.1977**	**9.5000e-004**	**0.1987**	**0.0524**	**8.7000e-004**	**0.0533**		**170.8939**	**170.8939**	**4.3300e-003**	**4.3600e-003**	**172.3027**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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	1.5231	29.9782	36.7226	0.0621		1.2994	1.2994		1.2994	1.2994	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**1.5231**	**29.9782**	**36.7226**	**0.0621**	**3.5894**	**1.2994**	**4.8888**	**1.4250**	**1.2994**	**2.7244**	**0.0000**	**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

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	0.0632	0.0418	0.5453	1.6700e-003	0.1977	9.5000e-004	0.1987	0.0524	8.7000e-004	0.0533		170.8939	170.8939	4.3300e-003	4.3600e-003	172.3027
Total	**0.0632**	**0.0418**	**0.5453**	**1.6700e-003**	**0.1977**	**9.5000e-004**	**0.1987**	**0.0524**	**8.7000e-004**	**0.0533**		**170.8939**	**170.8939**	**4.3300e-003**	**4.3600e-003**	**172.3027**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	0.1767	6.0529	1.9635	0.0225	0.7156	0.0354	0.7510	0.2062	0.0338	0.2400		2,409.7022	2,409.7022	0.0552	0.3536	2,516.4571
Worker	2.1955	1.3770	18.7354	0.0598	7.3059	0.0333	7.3391	1.9377	0.0307	1.9683		6,164.5743	6,164.5743	0.1453	0.1499	6,212.8768
Total	**2.3722**	**7.4299**	**20.6988**	**0.0822**	**8.0215**	**0.0687**	**8.0901**	**2.1438**	**0.0645**	**2.2083**		**8,574.2765**	**8,574.2765**	**0.2005**	**0.5035**	**8,729.3339**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.1767	6.0529	1.9635	0.0225	0.7156	0.0354	0.7510	0.2062	0.0338	0.2400		2,409.7022	2,409.7022	0.0552	0.3536	2,516.4571
Worker	2.1955	1.3770	18.7354	0.0598	7.3059	0.0333	7.3391	1.9377	0.0307	1.9683		6,164.5743	6,164.5743	0.1453	0.1499	6,212.8768
Total	**2.3722**	**7.4299**	**20.6988**	**0.0822**	**8.0215**	**0.0687**	**8.0901**	**2.1438**	**0.0645**	**2.2083**		**8,574.2765**	**8,574.2765**	**0.2005**	**0.5035**	**8,729.3339**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	0.1712	5.9242	1.9334	0.0221	0.7157	0.0346	0.7503	0.2062	0.0331	0.2392		2,367.8949	2,367.8949	0.0561	0.3472	2,472.7662
Worker	2.0744	1.2370	17.5217	0.0578	7.3059	0.0318	7.3377	1.9377	0.0293	1.9670		6,022.8814	6,022.8814	0.1321	0.1401	6,067.9391
Total	**2.2456**	**7.1612**	**19.4551**	**0.0799**	**8.0216**	**0.0664**	**8.0879**	**2.1438**	**0.0624**	**2.2062**		**8,390.7763**	**8,390.7763**	**0.1882**	**0.4873**	**8,540.7053**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.1712	5.9242	1.9334	0.0221	0.7157	0.0346	0.7503	0.2062	0.0331	0.2392		2,367.8949	2,367.8949	0.0561	0.3472	2,472.7662
Worker	2.0744	1.2370	17.5217	0.0578	7.3059	0.0318	7.3377	1.9377	0.0293	1.9670		6,022.8814	6,022.8814	0.1321	0.1401	6,067.9391
Total	**2.2456**	**7.1612**	**19.4551**	**0.0799**	**8.0216**	**0.0664**	**8.0879**	**2.1438**	**0.0624**	**2.2062**		**8,390.7763**	**8,390.7763**	**0.1882**	**0.4873**	**8,540.7053**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	0.1662	5.7956	1.9107	0.0217	0.7158	0.0336	0.7494	0.2062	0.0322	0.2384		2,325.3835	2,325.3835	0.0569	0.3407	2,428.3421
Worker	1.9688	1.1212	16.4974	0.0560	7.3059	0.0303	7.3361	1.9377	0.0279	1.9656		5,886.7978	5,886.7978	0.1207	0.1319	5,929.1292
Total	**2.1351**	**6.9168**	**18.4081**	**0.0777**	**8.0216**	**0.0639**	**8.0856**	**2.1439**	**0.0601**	**2.2039**		**8,212.1813**	**8,212.1813**	**0.1776**	**0.4727**	**8,357.4713**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.1662	5.7956	1.9107	0.0217	0.7158	0.0336	0.7494	0.2062	0.0322	0.2384		2,325.3835	2,325.3835	0.0569	0.3407	2,428.3421
Worker	1.9688	1.1212	16.4974	0.0560	7.3059	0.0303	7.3361	1.9377	0.0279	1.9656		5,886.7978	5,886.7978	0.1207	0.1319	5,929.1292
Total	**2.1351**	**6.9168**	**18.4081**	**0.0777**	**8.0216**	**0.0639**	**8.0856**	**2.1439**	**0.0601**	**2.2039**		**8,212.1813**	**8,212.1813**	**0.1776**	**0.4727**	**8,357.4713**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2027

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	0.1619	5.6741	1.8924	0.0212	0.7159	0.0328	0.7486	0.2062	0.0313	0.2376		2,279.5281	2,279.5281	0.0576	0.3338	2,380.4515
Worker	1.8701	1.0227	15.6168	0.0544	7.3059	0.0286	7.3344	1.9377	0.0263	1.9640		5,760.3267	5,760.3267	0.1108	0.1250	5,800.3371
Total	**2.0320**	**6.6968**	**17.5092**	**0.0756**	**8.0217**	**0.0613**	**8.0830**	**2.1439**	**0.0576**	**2.2015**		**8,039.8548**	**8,039.8548**	**0.1684**	**0.4588**	**8,180.7886**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2027

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.1619	5.6741	1.8924	0.0212	0.7159	0.0328	0.7486	0.2062	0.0313	0.2376		2,279.5281	2,279.5281	0.0576	0.3338	2,380.4515
Worker	1.8701	1.0227	15.6168	0.0544	7.3059	0.0286	7.3344	1.9377	0.0263	1.9640		5,760.3267	5,760.3267	0.1108	0.1250	5,800.3371
Total	**2.0320**	**6.6968**	**17.5092**	**0.0756**	**8.0217**	**0.0613**	**8.0830**	**2.1439**	**0.0576**	**2.2015**		**8,039.8548**	**8,039.8548**	**0.1684**	**0.4588**	**8,180.7886**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2028

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	0.1579	5.5691	1.8788	0.0208	0.7159	0.0320	0.7479	0.2063	0.0306	0.2368		2,235.7606	2,235.7606	0.0585	0.3272	2,334.7366
Worker	1.7738	0.9399	14.8769	0.0529	7.3059	0.0268	7.3327	1.9377	0.0247	1.9623		5,646.0048	5,646.0048	0.1022	0.1191	5,684.0477
Total	**1.9318**	**6.5090**	**16.7557**	**0.0737**	**8.0218**	**0.0588**	**8.0805**	**2.1439**	**0.0553**	**2.1992**		**7,881.7654**	**7,881.7654**	**0.1607**	**0.4463**	**8,018.7843**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2028

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.1579	5.5691	1.8788	0.0208	0.7159	0.0320	0.7479	0.2063	0.0306	0.2368		2,235.7606	2,235.7606	0.0585	0.3272	2,334.7366
Worker	1.7738	0.9399	14.8769	0.0529	7.3059	0.0268	7.3327	1.9377	0.0247	1.9623		5,646.0048	5,646.0048	0.1022	0.1191	5,684.0477
Total	**1.9318**	**6.5090**	**16.7557**	**0.0737**	**8.0218**	**0.0588**	**8.0805**	**2.1439**	**0.0553**	**2.1992**		**7,881.7654**	**7,881.7654**	**0.1607**	**0.4463**	**8,018.7843**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2029

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	0.1542	5.4611	1.8665	0.0204	0.7160	0.0312	0.7471	0.2063	0.0298	0.2361		2,191.3399	2,191.3399	0.0594	0.3205	2,288.3408
Worker	1.6799	0.8691	14.2289	0.0516	7.3059	0.0251	7.3310	1.9377	0.0231	1.9608		5,542.1314	5,542.1314	0.0945	0.1141	5,578.4898
Total	**1.8340**	**6.3302**	**16.0954**	**0.0720**	**8.0218**	**0.0563**	**8.0781**	**2.1439**	**0.0529**	**2.1969**		**7,733.4713**	**7,733.4713**	**0.1539**	**0.4346**	**7,866.8306**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2029

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.1542	5.4611	1.8665	0.0204	0.7160	0.0312	0.7471	0.2063	0.0298	0.2361		2,191.3399	2,191.3399	0.0594	0.3205	2,288.3408
Worker	1.6799	0.8691	14.2289	0.0516	7.3059	0.0251	7.3310	1.9377	0.0231	1.9608		5,542.1314	5,542.1314	0.0945	0.1141	5,578.4898
Total	**1.8340**	**6.3302**	**16.0954**	**0.0720**	**8.0218**	**0.0563**	**8.0781**	**2.1439**	**0.0529**	**2.1969**		**7,733.4713**	**7,733.4713**	**0.1539**	**0.4346**	**7,866.8306**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	43.5325					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	**43.7132**	**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	0.4397	0.2758	3.7521	0.0120	1.4632	6.6700e-003	1.4698	0.3881	6.1400e-003	0.3942		1,234.5832	1,234.5832	0.0291	0.0300	1,244.2568
Total	**0.4397**	**0.2758**	**3.7521**	**0.0120**	**1.4632**	**6.6700e-003**	**1.4698**	**0.3881**	**6.1400e-003**	**0.3942**		**1,234.5832**	**1,234.5832**	**0.0291**	**0.0300**	**1,244.2568**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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

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	43.5325					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**43.5919**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	0.4397	0.2758	3.7521	0.0120	1.4632	6.6700e-003	1.4698	0.3881	6.1400e-003	0.3942		1,234.5832	1,234.5832	0.0291	0.0300	1,244.2568
Total	**0.4397**	**0.2758**	**3.7521**	**0.0120**	**1.4632**	**6.6700e-003**	**1.4698**	**0.3881**	**6.1400e-003**	**0.3942**		**1,234.5832**	**1,234.5832**	**0.0291**	**0.0300**	**1,244.2568**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	43.5325					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	**43.7033**	**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	0.4154	0.2477	3.5091	0.0116	1.4632	6.3700e-003	1.4695	0.3881	5.8700e-003	0.3939		1,206.2063	1,206.2063	0.0265	0.0281	1,215.2300
Total	**0.4154**	**0.2477**	**3.5091**	**0.0116**	**1.4632**	**6.3700e-003**	**1.4695**	**0.3881**	**5.8700e-003**	**0.3939**		**1,206.2063**	**1,206.2063**	**0.0265**	**0.0281**	**1,215.2300**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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

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	43.5325					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**43.5919**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	0.4154	0.2477	3.5091	0.0116	1.4632	6.3700e-003	1.4695	0.3881	5.8700e-003	0.3939		1,206.2063	1,206.2063	0.0265	0.0281	1,215.2300
Total	**0.4154**	**0.2477**	**3.5091**	**0.0116**	**1.4632**	**6.3700e-003**	**1.4695**	**0.3881**	**5.8700e-003**	**0.3939**		**1,206.2063**	**1,206.2063**	**0.0265**	**0.0281**	**1,215.2300**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	43.5325					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	**43.7033**	**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	0.3943	0.2245	3.3039	0.0112	1.4632	6.0700e-003	1.4692	0.3881	5.5900e-003	0.3936		1,178.9527	1,178.9527	0.0242	0.0264	1,187.4305
Total	**0.3943**	**0.2245**	**3.3039**	**0.0112**	**1.4632**	**6.0700e-003**	**1.4692**	**0.3881**	**5.5900e-003**	**0.3936**		**1,178.9527**	**1,178.9527**	**0.0242**	**0.0264**	**1,187.4305**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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

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	43.5325					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**43.5919**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	0.3943	0.2245	3.3039	0.0112	1.4632	6.0700e-003	1.4692	0.3881	5.5900e-003	0.3936		1,178.9527	1,178.9527	0.0242	0.0264	1,187.4305
Total	**0.3943**	**0.2245**	**3.3039**	**0.0112**	**1.4632**	**6.0700e-003**	**1.4692**	**0.3881**	**5.5900e-003**	**0.3936**		**1,178.9527**	**1,178.9527**	**0.0242**	**0.0264**	**1,187.4305**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2027

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	43.5325					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	**43.7033**	**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	0.3745	0.2048	3.1276	0.0109	1.4632	5.7200e-003	1.4689	0.3881	5.2700e-003	0.3933		1,153.6243	1,153.6243	0.0222	0.0250	1,161.6372
Total	**0.3745**	**0.2048**	**3.1276**	**0.0109**	**1.4632**	**5.7200e-003**	**1.4689**	**0.3881**	**5.2700e-003**	**0.3933**		**1,153.6243**	**1,153.6243**	**0.0222**	**0.0250**	**1,161.6372**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2027

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	43.5325					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**43.5919**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	0.3745	0.2048	3.1276	0.0109	1.4632	5.7200e-003	1.4689	0.3881	5.2700e-003	0.3933		1,153.6243	1,153.6243	0.0222	0.0250	1,161.6372
Total	**0.3745**	**0.2048**	**3.1276**	**0.0109**	**1.4632**	**5.7200e-003**	**1.4689**	**0.3881**	**5.2700e-003**	**0.3933**		**1,153.6243**	**1,153.6243**	**0.0222**	**0.0250**	**1,161.6372**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

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	43.5325					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	**43.7033**	**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	0.3552	0.1882	2.9794	0.0106	1.4632	5.3700e-003	1.4685	0.3881	4.9400e-003	0.3930		1,130.7290	1,130.7290	0.0205	0.0239	1,138.3479
Total	**0.3552**	**0.1882**	**2.9794**	**0.0106**	**1.4632**	**5.3700e-003**	**1.4685**	**0.3881**	**4.9400e-003**	**0.3930**		**1,130.7290**	**1,130.7290**	**0.0205**	**0.0239**	**1,138.3479**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

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	43.5325					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**43.5919**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	0.3552	0.1882	2.9794	0.0106	1.4632	5.3700e-003	1.4685	0.3881	4.9400e-003	0.3930		1,130.7290	1,130.7290	0.0205	0.0239	1,138.3479
Total	**0.3552**	**0.1882**	**2.9794**	**0.0106**	**1.4632**	**5.3700e-003**	**1.4685**	**0.3881**	**4.9400e-003**	**0.3930**		**1,130.7290**	**1,130.7290**	**0.0205**	**0.0239**	**1,138.3479**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

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	43.5325					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	**43.7033**	**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	0.3364	0.1741	2.8496	0.0103	1.4632	5.0300e-003	1.4682	0.3881	4.6300e-003	0.3927		1,109.9262	1,109.9262	0.0189	0.0229	1,117.2077
Total	**0.3364**	**0.1741**	**2.8496**	**0.0103**	**1.4632**	**5.0300e-003**	**1.4682**	**0.3881**	**4.6300e-003**	**0.3927**		**1,109.9262**	**1,109.9262**	**0.0189**	**0.0229**	**1,117.2077**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

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	43.5325					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**43.5919**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	0.3364	0.1741	2.8496	0.0103	1.4632	5.0300e-003	1.4682	0.3881	4.6300e-003	0.3927		1,109.9262	1,109.9262	0.0189	0.0229	1,117.2077
Total	**0.3364**	**0.1741**	**2.8496**	**0.0103**	**1.4632**	**5.0300e-003**	**1.4682**	**0.3881**	**4.6300e-003**	**0.3927**		**1,109.9262**	**1,109.9262**	**0.0189**	**0.0229**	**1,117.2077**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2029

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	0.0341	0.0176	0.2888	1.0500e-003	0.1483	5.1000e-004	0.1488	0.0393	4.7000e-004	0.0398		112.4925	112.4925	1.9200e-003	2.3200e-003	113.2305
Total	**0.0341**	**0.0176**	**0.2888**	**1.0500e-003**	**0.1483**	**5.1000e-004**	**0.1488**	**0.0393**	**4.7000e-004**	**0.0398**		**112.4925**	**112.4925**	**1.9200e-003**	**2.3200e-003**	**113.2305**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2029

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	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	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	**0.5609**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**	**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	0.0341	0.0176	0.2888	1.0500e-003	0.1483	5.1000e-004	0.1488	0.0393	4.7000e-004	0.0398		112.4925	112.4925	1.9200e-003	2.3200e-003	113.2305
Total	**0.0341**	**0.0176**	**0.2888**	**1.0500e-003**	**0.1483**	**5.1000e-004**	**0.1488**	**0.0393**	**4.7000e-004**	**0.0398**		**112.4925**	**112.4925**	**1.9200e-003**	**2.3200e-003**	**113.2305**

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 Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Integrate Below Market Rate Housing

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	14.3487	25.3791	142.7455	0.4654	58.6024	0.3246	58.9270	15.6014	0.3032	15.9046		50,251.3973	50,251.3973	1.5671	2.2227	50,952.9416
Unmitigated	14.7737	29.0231	162.7543	0.5620	71.2526	0.3859	71.6385	18.9692	0.3605	19.3297		60,677.7593	60,677.7593	1.6958	2.5609	61,483.2989

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	4,575.00	4,965.40	3836.90	11,859,256	9,753,755
Single Family Housing	7,313.74	7,946.82	7322.07	19,406,808	15,961,308
Total	11,888.74	12,912.22	11,158.97	31,266,064	25,715,062

4.3 Trip Type Information

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	90	6	4
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	90	6	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000
Single Family Housing	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.8333	7.1205	3.0300	0.0455		0.5757	0.5757		0.5757	0.5757		9,090.0109	9,090.0109	0.1742	0.1667	9,144.0283
NaturalGas Unmitigated	0.8333	7.1205	3.0300	0.0455		0.5757	0.5757		0.5757	0.5757		9,090.0109	9,090.0109	0.1742	0.1667	9,144.0283

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	16491.4	0.1779	1.5198	0.6467	9.7000e-003		0.1229	0.1229		0.1229	0.1229		1,940.1618	1,940.1618	0.0372	0.0356	1,951.6912
Single Family Housing	60773.7	0.6554	5.6007	2.3833	0.0358		0.4528	0.4528		0.4528	0.4528		7,149.8491	7,149.8491	0.1370	0.1311	7,192.3371
Total		**0.8333**	**7.1205**	**3.0300**	**0.0455**		**0.5757**	**0.5757**		**0.5757**	**0.5757**		**9,090.0109**	**9,090.0109**	**0.1742**	**0.1667**	**9,144.0283**

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	16.4914	0.1779	1.5198	0.6467	9.7000e-003		0.1229	0.1229		0.1229	0.1229		1,940.1618	1,940.1618	0.0372	0.0356	1,951.6912
Single Family Housing	60.7737	0.6554	5.6007	2.3833	0.0358		0.4528	0.4528		0.4528	0.4528		7,149.8491	7,149.8491	0.1370	0.1311	7,192.3371
Total		**0.8333**	**7.1205**	**3.0300**	**0.0455**		**0.5757**	**0.5757**		**0.5757**	**0.5757**		**9,090.0109**	**9,090.0109**	**0.1742**	**0.1667**	**9,144.0283**

6.0 Area Detail

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	52.3088	1.3688	118.7347	6.2900e-003		0.6602	0.6602		0.6602	0.6602	0.0000	214.3610	214.3610	0.2042	0.0000	219.4668
Unmitigated	52.3088	1.3688	118.7347	6.2900e-003		0.6602	0.6602		0.6602	0.6602	0.0000	214.3610	214.3610	0.2042	0.0000	219.4668

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

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	3.6162					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	45.1412					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	3.5514	1.3688	118.7347	6.2900e-003		0.6602	0.6602		0.6602	0.6602		214.3610	214.3610	0.2042		219.4668
Total	**52.3088**	**1.3688**	**118.7347**	**6.2900e-003**		**0.6602**	**0.6602**		**0.6602**	**0.6602**	**0.0000**	**214.3610**	**214.3610**	**0.2042**	**0.0000**	**219.4668**

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	3.6162					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	45.1412					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	3.5514	1.3688	118.7347	6.2900e-003		0.6602	0.6602		0.6602	0.6602		214.3610	214.3610	0.2042		219.4668
Total	**52.3088**	**1.3688**	**118.7347**	**6.2900e-003**		**0.6602**	**0.6602**		**0.6602**	**0.6602**	**0.0000**	**214.3610**	**214.3610**	**0.2042**	**0.0000**	**219.4668**

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

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Summer

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

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dana Reserve Residential 2030 operatioinal

San Luis Obispo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	610.00	Dwelling Unit	23.50	610,000.00	1745
Single Family Housing	833.00	Dwelling Unit	149.50	1,499,400.00	2382

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
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 - Utility Intensity Factor based on renewable portfolio standars for PG&E for the year of 2030.

Land Use - Apartment Low Rise land use also includes 152 accessory dwelling units (ADU's) as per the traffic report. Lot acreage based on specific plan.

Construction Phase - Construction phasing is based on the anticipated building schedule for Dana Reserve.

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Off-road Equipment - Defualts

Trips and VMT - defualts

Demolition - No structures are currently on the project site.

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading - Defualts

Vehicle Trips - Trip gen for Weekday and sunday is based on traffic report, sat was left default. Trip length was also left as default. Trip type was based on traffic report.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Use low VOC paint (50g/L)

Construction Off-road Equipment Mitigation - Soil stabilizers, Water exposed areas, and use tier 3 engines.

Mobile Land Use Mitigation - 75 Units will be affordable.

Area Mitigation - Use Low VOC Paints

Energy Mitigation - Based on average residential solar systems production and residential usage 75% of electicity generated will be from residential solar. Use energy efficient appliances.

Water Mitigation - Install low flow fixtures and irrigation.

Waste Mitigation -

Fleet Mix - Based on SJVAPCD Residential fleet mix for year 2030.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	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

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	220.00	1,516.00
tblConstructionPhase	NumDays	3,100.00	1,545.00
tblConstructionPhase	NumDays	200.00	108.00
tblConstructionPhase	NumDays	310.00	130.00
tblConstructionPhase	NumDays	120.00	108.00
tblFleetMix	HHD	5.9170e-003	0.02
tblFleetMix	HHD	5.9170e-003	0.02

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDA	0.52	0.51
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD2	7.7950e-003	1.0000e-003
tblFleetMix	LHD2	7.7950e-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	4.8140e-003	3.0000e-003
tblFleetMix	MH	4.8140e-003	3.0000e-003
tblFleetMix	MHD	8.3410e-003	7.4000e-003
tblFleetMix	MHD	8.3410e-003	7.4000e-003
tblFleetMix	OBUS	8.8500e-004	0.00
tblFleetMix	OBUS	8.8500e-004	0.00
tblFleetMix	SBUS	7.9200e-004	1.2000e-003
tblFleetMix	SBUS	7.9200e-004	1.2000e-003
tblFleetMix	UBUS	3.4600e-004	4.4000e-003
tblFleetMix	UBUS	3.4600e-004	4.4000e-003
tblLandUse	LotAcreage	38.13	23.50
tblLandUse	LotAcreage	270.45	149.50
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.021
tblProjectCharacteristics	CO2IntensityFactor	203.98	127.09
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.002

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	DV_TP	11.00	6.00
tblVehicleTrips	DV_TP	11.00	6.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PR_TP	86.00	90.00
tblVehicleTrips	PR_TP	86.00	90.00
tblVehicleTrips	SU_TR	6.28	6.29
tblVehicleTrips	SU_TR	8.55	8.79
tblVehicleTrips	WD_TR	7.32	7.50
tblVehicleTrips	WD_TR	9.44	8.78

2.0 Emissions Summary

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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					
2023	5.0436	49.0869	38.7660	0.0795	19.9833	2.2651	22.2484	10.1890	2.0942	12.2832	0.0000	7,704.4555	7,704.4555	2.2496	7.8300e-003	7,763.0311
2024	48.2752	22.7970	42.0138	0.1212	9.4846	0.7498	10.2344	2.5319	0.7087	3.2405	0.0000	12,341.0242	12,341.0242	0.8635	0.5503	12,526.6017
2025	48.0017	21.4288	40.5099	0.1185	9.4847	0.6520	10.1367	2.5319	0.6162	3.1481	0.0000	12,137.8157	12,137.8157	0.8437	0.5311	12,317.1796
2026	47.8634	21.1408	39.3076	0.1161	9.4848	0.6492	10.1340	2.5319	0.6136	3.1455	0.0000	11,939.3601	11,939.3601	0.8300	0.5139	12,113.2546
2027	47.7332	20.8838	38.2712	0.1138	9.4849	0.6463	10.1311	2.5320	0.6108	3.1428	0.0000	11,748.4120	11,748.4120	0.8180	0.4979	11,917.2441
2028	47.6048	20.6647	37.4013	0.1117	9.4849	0.6434	10.1283	2.5320	0.6081	3.1401	0.0000	11,573.3747	11,573.3747	0.8078	0.4836	11,737.6926
2029	48.4324	29.0606	51.4977	0.1335	9.6333	1.0596	10.6928	2.5713	0.9910	3.5623	0.0000	13,724.1354	13,724.1354	1.5146	0.4729	13,902.9256
Maximum	**48.4324**	**49.0869**	**51.4977**	**0.1335**	**19.9833**	**2.2651**	**22.2484**	**10.1890**	**2.0942**	**12.2832**	**0.0000**	**13,724.1354**	**13,724.1354**	**2.2496**	**0.5503**	**13,902.9256**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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)

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					
2023	1.9708	37.4569	48.5123	0.0795	7.9925	1.8105	9.8029	4.0265	1.8103	5.8368	0.0000	7,704.4555	7,704.4555	2.2496	7.8300e-003	7,763.0311
2024	47.3562	23.7175	43.7431	0.1212	9.4846	1.0742	10.5588	2.5319	1.0695	3.6014	0.0000	12,341.0242	12,341.0242	0.8635	0.5503	12,526.6017
2025	47.1968	23.3966	42.3223	0.1185	9.4847	1.0716	10.5563	2.5319	1.0670	3.5989	0.0000	12,137.8157	12,137.8157	0.8437	0.5311	12,317.1796
2026	47.0585	23.1087	41.1199	0.1161	9.4848	1.0688	10.5536	2.5319	1.0645	3.5964	0.0000	11,939.3601	11,939.3601	0.8300	0.5139	12,113.2546
2027	46.9283	22.8516	40.0836	0.1138	9.4849	1.0658	10.5507	2.5320	1.0617	3.5937	0.0000	11,748.4120	11,748.4120	0.8180	0.4979	11,917.2441
2028	46.7998	22.6326	39.2137	0.1117	9.4849	1.0629	10.5478	2.5320	1.0590	3.5910	0.0000	11,573.3747	11,573.3747	0.8078	0.4836	11,737.6926
2029	47.2732	33.7421	56.0277	0.1335	9.6333	1.6699	11.3032	2.5713	1.6661	4.2375	0.0000	13,724.1354	13,724.1354	1.5146	0.4729	13,902.9256
Maximum	**47.3562**	**37.4569**	**56.0277**	**0.1335**	**9.6333**	**1.8105**	**11.3032**	**4.0265**	**1.8103**	**5.8368**	**0.0000**	**13,724.1354**	**13,724.1354**	**2.2496**	**0.5503**	**13,902.9256**

	ROG	NOx	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	**2.86**	**-1.00**	**-8.08**	**0.00**	**15.56**	**-32.38**	**11.75**	**24.24**	**-40.94**	**11.39**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	52.3088	1.3688	118.7347	6.2900e-003		0.6602	0.6602		0.6602	0.6602	0.0000	214.3610	214.3610	0.2042	0.0000	219.4668
Energy	0.8333	7.1205	3.0300	0.0455		0.5757	0.5757		0.5757	0.5757		9,090.0109	9,090.0109	0.1742	0.1667	9,144.0283
Mobile	13.8394	31.0352	168.2784	0.5429	71.2526	0.3863	71.6389	18.9692	0.3609	19.3301		58,613.5420	58,613.5420	1.8598	2.6833	59,459.6677
Total	**66.9814**	**39.5245**	**290.0431**	**0.5947**	**71.2526**	**1.6222**	**72.8748**	**18.9692**	**1.5968**	**20.5660**	**0.0000**	**67,917.9138**	**67,917.9138**	**2.2383**	**2.8500**	**68,823.1627**

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	52.3088	1.3688	118.7347	6.2900e-003		0.6602	0.6602		0.6602	0.6602	0.0000	214.3610	214.3610	0.2042	0.0000	219.4668
Energy	0.8333	7.1205	3.0300	0.0455		0.5757	0.5757		0.5757	0.5757		9,090.0109	9,090.0109	0.1742	0.1667	9,144.0283
Mobile	13.4177	27.1959	149.7979	0.4498	58.6024	0.3250	58.9274	15.6014	0.3036	15.9050		48,560.6501	48,560.6501	1.7347	2.3347	49,299.7564
Total	**66.5597**	**35.6852**	**271.5626**	**0.5016**	**58.6024**	**1.5609**	**60.1633**	**15.6014**	**1.5395**	**17.1409**	**0.0000**	**57,865.0219**	**57,865.0219**	**2.1132**	**2.5013**	**58,663.2514**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	**0.63**	**9.71**	**6.37**	**15.66**	**17.75**	**3.78**	**17.44**	**17.75**	**3.59**	**16.65**	**0.00**	**14.80**	**14.80**	**5.59**	**12.23**	**14.76**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2023	5/31/2023	5	108	
2	Site Preparation	Site Preparation	2/1/2023	6/30/2023	5	108	
3	Grading	Grading	7/3/2023	12/29/2023	5	130	
4	Building Construction	Building Construction	1/1/2024	11/30/2029	5	1545	
5	Architectural Coating	Architectural Coating	3/1/2024	12/21/2029	5	1516	
6	Paving	Paving	2/1/2029	12/5/2029	5	220	

Acres of Grading (Site Preparation Phase): 162

Acres of Grading (Grading Phase): 390

Acres of Paving: 0

Residential Indoor: 4,271,535; Residential Outdoor: 1,423,845; 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
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	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

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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
Demolition	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	739.00	154.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	148.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

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	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**		**0.9975**	**0.9975**		**0.9280**	**0.9280**		**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

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	0.0523	0.0356	0.3993	1.2000e-003	0.1483	7.1000e-004	0.1490	0.0393	6.6000e-004	0.0400		122.8016	122.8016	3.5100e-003	3.5600e-003	123.9505
Total	**0.0523**	**0.0356**	**0.3993**	**1.2000e-003**	**0.1483**	**7.1000e-004**	**0.1490**	**0.0393**	**6.6000e-004**	**0.0400**		**122.8016**	**122.8016**	**3.5100e-003**	**3.5600e-003**	**123.9505**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

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	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	**0.9246**	**18.3130**	**24.6739**	**0.0388**		**0.8627**	**0.8627**		**0.8627**	**0.8627**	**0.0000**	**3,746.9840**	**3,746.9840**	**1.0494**		**3,773.2183**

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	0.0523	0.0356	0.3993	1.2000e-003	0.1483	7.1000e-004	0.1490	0.0393	6.6000e-004	0.0400		122.8016	122.8016	3.5100e-003	3.5600e-003	123.9505
Total	**0.0523**	**0.0356**	**0.3993**	**1.2000e-003**	**0.1483**	**7.1000e-004**	**0.1490**	**0.0393**	**6.6000e-004**	**0.0400**		**122.8016**	**122.8016**	**3.5100e-003**	**3.5600e-003**	**123.9505**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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	0.0628	0.0427	0.4791	1.4400e-003	0.1780	8.5000e-004	0.1788	0.0472	7.9000e-004	0.0480		147.3619	147.3619	4.2100e-003	4.2700e-003	148.7406
Total	**0.0628**	**0.0427**	**0.4791**	**1.4400e-003**	**0.1780**	**8.5000e-004**	**0.1788**	**0.0472**	**7.9000e-004**	**0.0480**		**147.3619**	**147.3619**	**4.2100e-003**	**4.2700e-003**	**148.7406**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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	0.9312	19.0656	22.9600	0.0381		0.9462	0.9462		0.9462	0.9462	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**0.9312**	**19.0656**	**22.9600**	**0.0381**	**7.6662**	**0.9462**	**8.6124**	**3.9400**	**0.9462**	**4.8861**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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	0.0628	0.0427	0.4791	1.4400e-003	0.1780	8.5000e-004	0.1788	0.0472	7.9000e-004	0.0480		147.3619	147.3619	4.2100e-003	4.2700e-003	148.7406
Total	**0.0628**	**0.0427**	**0.4791**	**1.4400e-003**	**0.1780**	**8.5000e-004**	**0.1788**	**0.0472**	**7.9000e-004**	**0.0480**		**147.3619**	**147.3619**	**4.2100e-003**	**4.2700e-003**	**148.7406**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**9.2036**	**1.4245**	**10.6281**	**3.6538**	**1.3105**	**4.9643**		**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

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	0.0698	0.0475	0.5323	1.6000e-003	0.1977	9.5000e-004	0.1987	0.0524	8.7000e-004	0.0533		163.7354	163.7354	4.6800e-003	4.7500e-003	165.2673
Total	**0.0698**	**0.0475**	**0.5323**	**1.6000e-003**	**0.1977**	**9.5000e-004**	**0.1987**	**0.0524**	**8.7000e-004**	**0.0533**		**163.7354**	**163.7354**	**4.6800e-003**	**4.7500e-003**	**165.2673**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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	1.5231	29.9782	36.7226	0.0621		1.2994	1.2994		1.2994	1.2994	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**1.5231**	**29.9782**	**36.7226**	**0.0621**	**3.5894**	**1.2994**	**4.8888**	**1.4250**	**1.2994**	**2.7244**	**0.0000**	**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

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	0.0698	0.0475	0.5323	1.6000e-003	0.1977	9.5000e-004	0.1987	0.0524	8.7000e-004	0.0533		163.7354	163.7354	4.6800e-003	4.7500e-003	165.2673
Total	**0.0698**	**0.0475**	**0.5323**	**1.6000e-003**	**0.1977**	**9.5000e-004**	**0.1987**	**0.0524**	**8.7000e-004**	**0.0533**		**163.7354**	**163.7354**	**4.6800e-003**	**4.7500e-003**	**165.2673**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	0.1722	6.2579	2.0405	0.0225	0.7156	0.0356	0.7512	0.2062	0.0340	0.2402		2,413.9059	2,413.9059	0.0548	0.3546	2,520.9315
Worker	2.4312	1.5634	18.3262	0.0573	7.3059	0.0333	7.3391	1.9377	0.0307	1.9683		5,906.9773	5,906.9773	0.1570	0.1631	5,959.5045
Total	**2.6035**	**7.8213**	**20.3667**	**0.0798**	**8.0215**	**0.0689**	**8.0903**	**2.1438**	**0.0647**	**2.2085**		**8,320.8832**	**8,320.8832**	**0.2118**	**0.5176**	**8,480.4360**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.1722	6.2579	2.0405	0.0225	0.7156	0.0356	0.7512	0.2062	0.0340	0.2402		2,413.9059	2,413.9059	0.0548	0.3546	2,520.9315
Worker	2.4312	1.5634	18.3262	0.0573	7.3059	0.0333	7.3391	1.9377	0.0307	1.9683		5,906.9773	5,906.9773	0.1570	0.1631	5,959.5045
Total	**2.6035**	**7.8213**	**20.3667**	**0.0798**	**8.0215**	**0.0689**	**8.0903**	**2.1438**	**0.0647**	**2.2085**		**8,320.8832**	**8,320.8832**	**0.2118**	**0.5176**	**8,480.4360**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	0.1664	6.1277	2.0096	0.0221	0.7157	0.0348	0.7504	0.2062	0.0332	0.2394		2,372.2153	2,372.2153	0.0557	0.3482	2,477.3561
Worker	2.3033	1.4046	17.1682	0.0554	7.3059	0.0318	7.3377	1.9377	0.0293	1.9670		5,771.7633	5,771.7633	0.1431	0.1524	5,820.7652
Total	**2.4697**	**7.5323**	**19.1778**	**0.0775**	**8.0216**	**0.0666**	**8.0881**	**2.1438**	**0.0625**	**2.2064**		**8,143.9786**	**8,143.9786**	**0.1988**	**0.5006**	**8,298.1213**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.1664	6.1277	2.0096	0.0221	0.7157	0.0348	0.7504	0.2062	0.0332	0.2394		2,372.2153	2,372.2153	0.0557	0.3482	2,477.3561
Worker	2.3033	1.4046	17.1682	0.0554	7.3059	0.0318	7.3377	1.9377	0.0293	1.9670		5,771.7633	5,771.7633	0.1431	0.1524	5,820.7652
Total	**2.4697**	**7.5323**	**19.1778**	**0.0775**	**8.0216**	**0.0666**	**8.0881**	**2.1438**	**0.0625**	**2.2064**		**8,143.9786**	**8,143.9786**	**0.1988**	**0.5006**	**8,298.1213**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	0.1610	5.9975	1.9859	0.0217	0.7158	0.0338	0.7496	0.2062	0.0323	0.2385		2,329.7958	2,329.7958	0.0565	0.3417	2,433.0228
Worker	2.1926	1.2732	16.1862	0.0537	7.3059	0.0303	7.3361	1.9377	0.0279	1.9656		5,641.7625	5,641.7625	0.1310	0.1435	5,687.8022
Total	**2.3536**	**7.2707**	**18.1721**	**0.0754**	**8.0216**	**0.0641**	**8.0857**	**2.1439**	**0.0602**	**2.2041**		**7,971.5583**	**7,971.5583**	**0.1875**	**0.4852**	**8,120.8250**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.1610	5.9975	1.9859	0.0217	0.7158	0.0338	0.7496	0.2062	0.0323	0.2385		2,329.7958	2,329.7958	0.0565	0.3417	2,433.0228
Worker	2.1926	1.2732	16.1862	0.0537	7.3059	0.0303	7.3361	1.9377	0.0279	1.9656		5,641.7625	5,641.7625	0.1310	0.1435	5,687.8022
Total	**2.3536**	**7.2707**	**18.1721**	**0.0754**	**8.0216**	**0.0641**	**8.0857**	**2.1439**	**0.0602**	**2.2041**		**7,971.5583**	**7,971.5583**	**0.1875**	**0.4852**	**8,120.8250**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2027

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	0.1563	5.8744	1.9668	0.0213	0.7159	0.0329	0.7488	0.2062	0.0315	0.2377		2,284.0117	2,284.0117	0.0572	0.3348	2,385.2023
Worker	2.0880	1.1616	15.3387	0.0522	7.3059	0.0286	7.3344	1.9377	0.0263	1.9640		5,520.8198	5,520.8198	0.1204	0.1359	5,564.3383
Total	**2.2444**	**7.0360**	**17.3055**	**0.0734**	**8.0217**	**0.0615**	**8.0832**	**2.1439**	**0.0578**	**2.2017**		**7,804.8315**	**7,804.8315**	**0.1776**	**0.4707**	**7,949.5406**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2027

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.1563	5.8744	1.9668	0.0213	0.7159	0.0329	0.7488	0.2062	0.0315	0.2377		2,284.0117	2,284.0117	0.0572	0.3348	2,385.2023
Worker	2.0880	1.1616	15.3387	0.0522	7.3059	0.0286	7.3344	1.9377	0.0263	1.9640		5,520.8198	5,520.8198	0.1204	0.1359	5,564.3383
Total	**2.2444**	**7.0360**	**17.3055**	**0.0734**	**8.0217**	**0.0615**	**8.0832**	**2.1439**	**0.0578**	**2.2017**		**7,804.8315**	**7,804.8315**	**0.1776**	**0.4707**	**7,949.5406**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2028

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	0.1520	5.7682	1.9525	0.0208	0.7159	0.0321	0.7480	0.2063	0.0307	0.2370		2,240.2942	2,240.2942	0.0581	0.3282	2,339.5361
Worker	1.9846	1.0676	14.6259	0.0507	7.3059	0.0268	7.3327	1.9377	0.0247	1.9623		5,411.4113	5,411.4113	0.1112	0.1295	5,452.7924
Total	**2.1366**	**6.8358**	**16.5784**	**0.0716**	**8.0218**	**0.0589**	**8.0807**	**2.1439**	**0.0554**	**2.1993**		**7,651.7055**	**7,651.7055**	**0.1693**	**0.4577**	**7,792.3285**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2028

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.1520	5.7682	1.9525	0.0208	0.7159	0.0321	0.7480	0.2063	0.0307	0.2370		2,240.2942	2,240.2942	0.0581	0.3282	2,339.5361
Worker	1.9846	1.0676	14.6259	0.0507	7.3059	0.0268	7.3327	1.9377	0.0247	1.9623		5,411.4113	5,411.4113	0.1112	0.1295	5,452.7924
Total	**2.1366**	**6.8358**	**16.5784**	**0.0716**	**8.0218**	**0.0589**	**8.0807**	**2.1439**	**0.0554**	**2.1993**		**7,651.7055**	**7,651.7055**	**0.1693**	**0.4577**	**7,792.3285**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2029

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	0.1480	5.6588	1.9394	0.0204	0.7160	0.0313	0.7473	0.2063	0.0299	0.2362		2,195.9132	2,195.9132	0.0589	0.3215	2,293.1791
Worker	1.8832	0.9873	13.9988	0.0495	7.3059	0.0251	7.3310	1.9377	0.0231	1.9608		5,311.9145	5,311.9145	0.1030	0.1241	5,351.4650
Total	**2.0311**	**6.6461**	**15.9382**	**0.0699**	**8.0218**	**0.0564**	**8.0782**	**2.1439**	**0.0531**	**2.1970**		**7,507.8277**	**7,507.8277**	**0.1619**	**0.4455**	**7,644.6441**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2029

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**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	0.1480	5.6588	1.9394	0.0204	0.7160	0.0313	0.7473	0.2063	0.0299	0.2362		2,195.9132	2,195.9132	0.0589	0.3215	2,293.1791
Worker	1.8832	0.9873	13.9988	0.0495	7.3059	0.0251	7.3310	1.9377	0.0231	1.9608		5,311.9145	5,311.9145	0.1030	0.1241	5,351.4650
Total	**2.0311**	**6.6461**	**15.9382**	**0.0699**	**8.0218**	**0.0564**	**8.0782**	**2.1439**	**0.0531**	**2.1970**		**7,507.8277**	**7,507.8277**	**0.1619**	**0.4455**	**7,644.6441**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	43.5325					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	**43.7132**	**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	0.4869	0.3131	3.6702	0.0115	1.4632	6.6700e-003	1.4698	0.3881	6.1400e-003	0.3942		1,182.9941	1,182.9941	0.0315	0.0327	1,193.5138
Total	**0.4869**	**0.3131**	**3.6702**	**0.0115**	**1.4632**	**6.6700e-003**	**1.4698**	**0.3881**	**6.1400e-003**	**0.3942**		**1,182.9941**	**1,182.9941**	**0.0315**	**0.0327**	**1,193.5138**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	43.5325					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**43.5919**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	0.4869	0.3131	3.6702	0.0115	1.4632	6.6700e-003	1.4698	0.3881	6.1400e-003	0.3942		1,182.9941	1,182.9941	0.0315	0.0327	1,193.5138
Total	**0.4869**	**0.3131**	**3.6702**	**0.0115**	**1.4632**	**6.6700e-003**	**1.4698**	**0.3881**	**6.1400e-003**	**0.3942**		**1,182.9941**	**1,182.9941**	**0.0315**	**0.0327**	**1,193.5138**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	43.5325					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	**43.7033**	**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	0.4613	0.2813	3.4383	0.0111	1.4632	6.3700e-003	1.4695	0.3881	5.8700e-003	0.3939		1,155.9147	1,155.9147	0.0287	0.0305	1,165.7284
Total	**0.4613**	**0.2813**	**3.4383**	**0.0111**	**1.4632**	**6.3700e-003**	**1.4695**	**0.3881**	**5.8700e-003**	**0.3939**		**1,155.9147**	**1,155.9147**	**0.0287**	**0.0305**	**1,165.7284**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	43.5325					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**43.5919**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	0.4613	0.2813	3.4383	0.0111	1.4632	6.3700e-003	1.4695	0.3881	5.8700e-003	0.3939		1,155.9147	1,155.9147	0.0287	0.0305	1,165.7284
Total	**0.4613**	**0.2813**	**3.4383**	**0.0111**	**1.4632**	**6.3700e-003**	**1.4695**	**0.3881**	**5.8700e-003**	**0.3939**		**1,155.9147**	**1,155.9147**	**0.0287**	**0.0305**	**1,165.7284**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	43.5325					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	**43.7033**	**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	0.4391	0.2550	3.2416	0.0108	1.4632	6.0700e-003	1.4692	0.3881	5.5900e-003	0.3936		1,129.8794	1,129.8794	0.0262	0.0287	1,139.0998
Total	**0.4391**	**0.2550**	**3.2416**	**0.0108**	**1.4632**	**6.0700e-003**	**1.4692**	**0.3881**	**5.5900e-003**	**0.3936**		**1,129.8794**	**1,129.8794**	**0.0262**	**0.0287**	**1,139.0998**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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

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	43.5325					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**43.5919**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	0.4391	0.2550	3.2416	0.0108	1.4632	6.0700e-003	1.4692	0.3881	5.5900e-003	0.3936		1,129.8794	1,129.8794	0.0262	0.0287	1,139.0998
Total	**0.4391**	**0.2550**	**3.2416**	**0.0108**	**1.4632**	**6.0700e-003**	**1.4692**	**0.3881**	**5.5900e-003**	**0.3936**		**1,129.8794**	**1,129.8794**	**0.0262**	**0.0287**	**1,139.0998**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2027

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	43.5325					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	**43.7033**	**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	0.4182	0.2326	3.0719	0.0105	1.4632	5.7200e-003	1.4689	0.3881	5.2700e-003	0.3933		1,105.6581	1,105.6581	0.0241	0.0272	1,114.3736
Total	**0.4182**	**0.2326**	**3.0719**	**0.0105**	**1.4632**	**5.7200e-003**	**1.4689**	**0.3881**	**5.2700e-003**	**0.3933**		**1,105.6581**	**1,105.6581**	**0.0241**	**0.0272**	**1,114.3736**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2027

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	43.5325					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**43.5919**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	0.4182	0.2326	3.0719	0.0105	1.4632	5.7200e-003	1.4689	0.3881	5.2700e-003	0.3933		1,105.6581	1,105.6581	0.0241	0.0272	1,114.3736
Total	**0.4182**	**0.2326**	**3.0719**	**0.0105**	**1.4632**	**5.7200e-003**	**1.4689**	**0.3881**	**5.2700e-003**	**0.3933**		**1,105.6581**	**1,105.6581**	**0.0241**	**0.0272**	**1,114.3736**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

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	43.5325					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	**43.7033**	**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	0.3975	0.2138	2.9291	0.0102	1.4632	5.3700e-003	1.4685	0.3881	4.9400e-003	0.3930		1,083.7468	1,083.7468	0.0223	0.0259	1,092.0342
Total	**0.3975**	**0.2138**	**2.9291**	**0.0102**	**1.4632**	**5.3700e-003**	**1.4685**	**0.3881**	**4.9400e-003**	**0.3930**		**1,083.7468**	**1,083.7468**	**0.0223**	**0.0259**	**1,092.0342**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

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	43.5325					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**43.5919**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	0.3975	0.2138	2.9291	0.0102	1.4632	5.3700e-003	1.4685	0.3881	4.9400e-003	0.3930		1,083.7468	1,083.7468	0.0223	0.0259	1,092.0342
Total	**0.3975**	**0.2138**	**2.9291**	**0.0102**	**1.4632**	**5.3700e-003**	**1.4685**	**0.3881**	**4.9400e-003**	**0.3930**		**1,083.7468**	**1,083.7468**	**0.0223**	**0.0259**	**1,092.0342**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

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	43.5325					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	**43.7033**	**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	0.3771	0.1977	2.8036	9.9100e-003	1.4632	5.0300e-003	1.4682	0.3881	4.6300e-003	0.3927		1,063.8205	1,063.8205	0.0206	0.0249	1,071.7413
Total	**0.3771**	**0.1977**	**2.8036**	**9.9100e-003**	**1.4632**	**5.0300e-003**	**1.4682**	**0.3881**	**4.6300e-003**	**0.3927**		**1,063.8205**	**1,063.8205**	**0.0206**	**0.0249**	**1,071.7413**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

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	43.5325					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**43.5919**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**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	0.3771	0.1977	2.8036	9.9100e-003	1.4632	5.0300e-003	1.4682	0.3881	4.6300e-003	0.3927		1,063.8205	1,063.8205	0.0206	0.0249	1,071.7413
Total	**0.3771**	**0.1977**	**2.8036**	**9.9100e-003**	**1.4632**	**5.0300e-003**	**1.4682**	**0.3881**	**4.6300e-003**	**0.3927**		**1,063.8205**	**1,063.8205**	**0.0206**	**0.0249**	**1,071.7413**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2029

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	0.0382	0.0200	0.2841	1.0000e-003	0.1483	5.1000e-004	0.1488	0.0393	4.7000e-004	0.0398		107.8197	107.8197	2.0900e-003	2.5200e-003	108.6224
Total	**0.0382**	**0.0200**	**0.2841**	**1.0000e-003**	**0.1483**	**5.1000e-004**	**0.1488**	**0.0393**	**4.7000e-004**	**0.0398**		**107.8197**	**107.8197**	**2.0900e-003**	**2.5200e-003**	**108.6224**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2029

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	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	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	**0.5609**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**	**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	0.0382	0.0200	0.2841	1.0000e-003	0.1483	5.1000e-004	0.1488	0.0393	4.7000e-004	0.0398		107.8197	107.8197	2.0900e-003	2.5200e-003	108.6224
Total	**0.0382**	**0.0200**	**0.2841**	**1.0000e-003**	**0.1483**	**5.1000e-004**	**0.1488**	**0.0393**	**4.7000e-004**	**0.0398**		**107.8197**	**107.8197**	**2.0900e-003**	**2.5200e-003**	**108.6224**

Dana Reserve Residential 2030 operatioinal - San Luis Obispo County, Winter

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 Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Integrate Below Market Rate Housing

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	13.4177	27.1959	149.7979	0.4498	58.6024	0.3250	58.9274	15.6014	0.3036	15.9050		48,560.6501	48,560.6501	1.7347	2.3347	49,299.7564
Unmitigated	13.8394	31.0352	168.2784	0.5429	71.2526	0.3863	71.6389	18.9692	0.3609	19.3301		58,613.5420	58,613.5420	1.8598	2.6833	59,459.6677

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	4,575.00	4,965.40	3836.90	11,859,256	9,753,755
Single Family Housing	7,313.74	7,946.82	7322.07	19,406,808	15,961,308
Total	11,888.74	12,912.22	11,158.97	31,266,064	25,715,062

4.3 Trip Type Information

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	90	6	4
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	90	6	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000
Single Family Housing	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.8333	7.1205	3.0300	0.0455		0.5757	0.5757		0.5757	0.5757		9,090.0109	9,090.0109	0.1742	0.1667	9,144.0283
NaturalGas Unmitigated	0.8333	7.1205	3.0300	0.0455		0.5757	0.5757		0.5757	0.5757		9,090.0109	9,090.0109	0.1742	0.1667	9,144.0283

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					
Apartments Low Rise	16491.4	0.1779	1.5198	0.6467	9.7000e-003		0.1229	0.1229		0.1229	0.1229		1,940.1618	1,940.1618	0.0372	0.0356	1,951.6912
Single Family Housing	60773.7	0.6554	5.6007	2.3833	0.0358		0.4528	0.4528		0.4528	0.4528		7,149.8491	7,149.8491	0.1370	0.1311	7,192.3371
Total		**0.8333**	**7.1205**	**3.0300**	**0.0455**		**0.5757**	**0.5757**		**0.5757**	**0.5757**		**9,090.0109**	**9,090.0109**	**0.1742**	**0.1667**	**9,144.0283**

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	16.4914	0.1779	1.5198	0.6467	9.7000e-003		0.1229	0.1229		0.1229	0.1229		1,940.1618	1,940.1618	0.0372	0.0356	1,951.6912
Single Family Housing	60.7737	0.6554	5.6007	2.3833	0.0358		0.4528	0.4528		0.4528	0.4528		7,149.8491	7,149.8491	0.1370	0.1311	7,192.3371
Total		**0.8333**	**7.1205**	**3.0300**	**0.0455**		**0.5757**	**0.5757**		**0.5757**	**0.5757**		**9,090.0109**	**9,090.0109**	**0.1742**	**0.1667**	**9,144.0283**

6.0 Area Detail

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	52.3088	1.3688	118.7347	6.2900e-003		0.6602	0.6602		0.6602	0.6602	0.0000	214.3610	214.3610	0.2042	0.0000	219.4668
Unmitigated	52.3088	1.3688	118.7347	6.2900e-003		0.6602	0.6602		0.6602	0.6602	0.0000	214.3610	214.3610	0.2042	0.0000	219.4668

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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	3.6162					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	45.1412					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	3.5514	1.3688	118.7347	6.2900e-003		0.6602	0.6602		0.6602	0.6602		214.3610	214.3610	0.2042		219.4668
Total	**52.3088**	**1.3688**	**118.7347**	**6.2900e-003**		**0.6602**	**0.6602**		**0.6602**	**0.6602**	**0.0000**	**214.3610**	**214.3610**	**0.2042**	**0.0000**	**219.4668**

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	3.6162					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	45.1412					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	3.5514	1.3688	118.7347	6.2900e-003		0.6602	0.6602		0.6602	0.6602		214.3610	214.3610	0.2042		219.4668
Total	**52.3088**	**1.3688**	**118.7347**	**6.2900e-003**		**0.6602**	**0.6602**		**0.6602**	**0.6602**	**0.0000**	**214.3610**	**214.3610**	**0.2042**	**0.0000**	**219.4668**

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

Dana Reserve Residential 2030 operatioinal - San Luis Obispo 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

Dana Reserve Hotel 2030 - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dana Reserve Hotel 2030

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	110.00	Room	3.67	60,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
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 - Utility intensity factor is based on renewable portfolio standars for PG&E in year 2030

Land Use - As per traffic report the hotel is 110 rooms and as per buildout schedule the hotel will be 60,000sqft.

Construction Phase - Demo, site prep, and grading will be completed at start of residential and so are not accounted for in this model run.

Off-road Equipment - Defualt

Off-road Equipment - Defualt

Off-road Equipment - Defualt

Vehicle Trips - Weekday and sunday trip generation is based on traffic report. Trip type is based on traffic report.

Construction Off-road Equipment Mitigation - Tier 3 engines, soil stabilizers, water exposed areas 3 times per day, and a speed limit of 15mph on unpaved roads.

Area Mitigation - Use low VOC paints (50g/L)

Energy Mitigation -

Water Mitigation -

Dana Reserve Hotel 2030 - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Waste Mitigation -

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Dana Reserve Hotel 2030 - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblLandUse	LandUseSquareFeet	159,720.00	60,000.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.021
tblProjectCharacteristics	CO2IntensityFactor	203.98	127.09
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.002
tblVehicleTrips	DV_TP	38.00	6.00
tblVehicleTrips	PR_TP	58.00	90.00
tblVehicleTrips	SU_TR	5.95	5.96

2.0 Emissions Summary

Dana Reserve Hotel 2030 - San Luis Obispo County, Annual

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					
2026	0.8710	1.5620	2.0576	3.6900e-003	0.0351	0.0647	0.0998	9.4400e-003	0.0608	0.0703	0.0000	321.1348	321.1348	0.0683	2.8500e-003	323.6919
Maximum	**0.8710**	**1.5620**	**2.0576**	**3.6900e-003**	**0.0351**	**0.0647**	**0.0998**	**9.4400e-003**	**0.0608**	**0.0703**	**0.0000**	**321.1348**	**321.1348**	**0.0683**	**2.8500e-003**	**323.6919**

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					
2026	0.7868	1.7799	2.2758	3.6900e-003	0.0351	0.1099	0.1449	9.4400e-003	0.1098	0.1193	0.0000	321.1345	321.1345	0.0683	2.8500e-003	323.6916
Maximum	**0.7868**	**1.7799**	**2.2758**	**3.6900e-003**	**0.0351**	**0.1099**	**0.1449**	**9.4400e-003**	**0.1098**	**0.1193**	**0.0000**	**321.1345**	**321.1345**	**0.0683**	**2.8500e-003**	**323.6916**

	ROG	NOx	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	**9.66**	**-13.95**	**-10.60**	**0.00**	**0.00**	**-69.85**	**-45.29**	**0.00**	**-80.60**	**-69.76**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Dana Reserve Hotel 2030 - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2026	3-31-2026	0.4614	0.4955
2	4-1-2026	6-30-2026	0.4657	0.5002
3	7-1-2026	9-30-2026	0.4708	0.5057
		Highest	0.4708	0.5057

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	0.3040	2.0000e-005	1.8400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6000e-003	3.6000e-003	1.0000e-005	0.0000	3.8400e-003
Energy	0.0142	0.1292	0.1085	7.7000e-004		9.8200e-003	9.8200e-003		9.8200e-003	9.8200e-003	0.0000	166.1876	166.1876	6.9200e-003	2.9800e-003	167.2488
Mobile	0.3464	0.3947	2.9845	5.8200e-003	0.7167	4.8100e-003	0.7215	0.1913	4.5100e-003	0.1959	0.0000	566.2846	566.2846	0.0365	0.0277	575.4634
Waste						0.0000	0.0000		0.0000	0.0000	12.2262	0.0000	12.2262	0.7225	0.0000	30.2898
Water						0.0000	0.0000		0.0000	0.0000	0.8853	0.9329	1.8182	0.0911	2.1600e-003	4.7393
Total	**0.6647**	**0.5239**	**3.0948**	**6.5900e-003**	**0.7167**	**0.0146**	**0.7313**	**0.1913**	**0.0143**	**0.2057**	**13.1114**	**733.4087**	**746.5201**	**0.8570**	**0.0329**	**777.7451**

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	0.2484	2.0000e-005	1.8400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6000e-003	3.6000e-003	1.0000e-005	0.0000	3.8400e-003
Energy	0.0142	0.1292	0.1085	7.7000e-004		9.8200e-003	9.8200e-003		9.8200e-003	9.8200e-003	0.0000	165.6376	165.6376	6.8300e-003	2.9700e-003	166.6940
Mobile	0.3371	0.3763	2.8542	5.4900e-003	0.6740	4.5600e-003	0.6786	0.1800	4.2700e-003	0.1842	0.0000	533.7086	533.7086	0.0351	0.0265	542.4917
Waste						0.0000	0.0000		0.0000	0.0000	6.1131	0.0000	6.1131	0.3613	0.0000	15.1449
Water						0.0000	0.0000		0.0000	0.0000	0.7472	0.7934	1.5405	0.0769	1.8200e-003	4.0060
Total	**0.5997**	**0.5054**	**2.9645**	**6.2600e-003**	**0.6740**	**0.0144**	**0.6884**	**0.1800**	**0.0141**	**0.1941**	**6.8602**	**700.1432**	**707.0034**	**0.4801**	**0.0313**	**728.3404**

	ROG	NOx	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	**9.78**	**3.52**	**4.21**	**5.01**	**5.95**	**1.71**	**5.87**	**5.95**	**1.67**	**5.65**	**47.68**	**4.54**	**5.29**	**43.98**	**4.74**	**6.35**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2026	11/18/2026	5	230	
2	Paving	Paving	11/2/2026	11/25/2026	5	18	
3	Architectural Coating	Architectural Coating	11/23/2026	12/16/2026	5	18	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 90,000; Non-Residential Outdoor: 30,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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
Building Construction	9	25.00	10.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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	0.1573	1.4340	1.8497	3.1000e-003		0.0607	0.0607		0.0571	0.0571	0.0000	266.7074	266.7074	0.0627	0.0000	268.2747
Total	**0.1573**	**1.4340**	**1.8497**	**3.1000e-003**		**0.0607**	**0.0607**		**0.0571**	**0.0571**	**0.0000**	**266.7074**	**266.7074**	**0.0627**	**0.0000**	**268.2747**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	1.2200e-003	0.0446	0.0146	1.6000e-004	5.2300e-003	2.5000e-004	5.4800e-003	1.5100e-003	2.4000e-004	1.7500e-003	0.0000	15.7656	15.7656	3.8000e-004	2.3100e-003	16.4641
Worker	7.7500e-003	4.8400e-003	0.0625	2.1000e-004	0.0277	1.2000e-004	0.0278	7.3600e-003	1.1000e-004	7.4600e-003	0.0000	20.0540	20.0540	4.5000e-004	5.0000e-004	20.2139
Total	**8.9700e-003**	**0.0495**	**0.0771**	**3.7000e-004**	**0.0329**	**3.7000e-004**	**0.0333**	**8.8700e-003**	**3.5000e-004**	**9.2100e-003**	**0.0000**	**35.8197**	**35.8197**	**8.3000e-004**	**2.8100e-003**	**36.6780**

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	0.0775	1.6360	2.0555	3.1000e-003		0.1039	0.1039		0.1039	0.1039	0.0000	266.7071	266.7071	0.0627	0.0000	268.2744
Total	**0.0775**	**1.6360**	**2.0555**	**3.1000e-003**		**0.1039**	**0.1039**		**0.1039**	**0.1039**	**0.0000**	**266.7071**	**266.7071**	**0.0627**	**0.0000**	**268.2744**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	1.2200e-003	0.0446	0.0146	1.6000e-004	5.2300e-003	2.5000e-004	5.4800e-003	1.5100e-003	2.4000e-004	1.7500e-003	0.0000	15.7656	15.7656	3.8000e-004	2.3100e-003	16.4641
Worker	7.7500e-003	4.8400e-003	0.0625	2.1000e-004	0.0277	1.2000e-004	0.0278	7.3600e-003	1.1000e-004	7.4600e-003	0.0000	20.0540	20.0540	4.5000e-004	5.0000e-004	20.2139
Total	**8.9700e-003**	**0.0495**	**0.0771**	**3.7000e-004**	**0.0329**	**3.7000e-004**	**0.0333**	**8.8700e-003**	**3.5000e-004**	**9.2100e-003**	**0.0000**	**35.8197**	**35.8197**	**8.3000e-004**	**2.8100e-003**	**36.6780**

3.3 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	7.3800e-003	0.0678	0.1096	1.7000e-004		3.1700e-003	3.1700e-003		2.9300e-003	2.9300e-003	0.0000	14.7404	14.7404	4.6300e-003	0.0000	14.8562
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.3800e-003**	**0.0678**	**0.1096**	**1.7000e-004**		**3.1700e-003**	**3.1700e-003**		**2.9300e-003**	**2.9300e-003**	**0.0000**	**14.7404**	**14.7404**	**4.6300e-003**	**0.0000**	**14.8562**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 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	4.9000e-004	3.0000e-004	3.9200e-003	1.0000e-005	1.7300e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.2556	1.2556	3.0000e-005	3.0000e-005	1.2656
Total	**4.9000e-004**	**3.0000e-004**	**3.9200e-003**	**1.0000e-005**	**1.7300e-003**	**1.0000e-005**	**1.7400e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.2556**	**1.2556**	**3.0000e-005**	**3.0000e-005**	**1.2656**

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	3.9500e-003	0.0818	0.1218	1.7000e-004		4.7200e-003	4.7200e-003		4.7200e-003	4.7200e-003	0.0000	14.7404	14.7404	4.6300e-003	0.0000	14.8562
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.9500e-003**	**0.0818**	**0.1218**	**1.7000e-004**		**4.7200e-003**	**4.7200e-003**		**4.7200e-003**	**4.7200e-003**	**0.0000**	**14.7404**	**14.7404**	**4.6300e-003**	**0.0000**	**14.8562**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 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	4.9000e-004	3.0000e-004	3.9200e-003	1.0000e-005	1.7300e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.2556	1.2556	3.0000e-005	3.0000e-005	1.2656
Total	**4.9000e-004**	**3.0000e-004**	**3.9200e-003**	**1.0000e-005**	**1.7300e-003**	**1.0000e-005**	**1.7400e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.2556**	**1.2556**	**3.0000e-005**	**3.0000e-005**	**1.2656**

3.4 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	0.6953					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	**0.6968**	**0.0103**	**0.0163**	**3.0000e-005**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.3000e-004**	**0.0000**	**2.3011**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	1.2000e-004	8.0000e-005	9.8000e-004	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3139	0.3139	1.0000e-005	1.0000e-005	0.3164
Total	**1.2000e-004**	**8.0000e-005**	**9.8000e-004**	**0.0000**	**4.3000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3139**	**0.3139**	**1.0000e-005**	**1.0000e-005**	**0.3164**

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	0.6953					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3000e-004	0.0122	0.0165	3.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	**0.6958**	**0.0122**	**0.0165**	**3.0000e-005**		**8.6000e-004**	**8.6000e-004**		**8.6000e-004**	**8.6000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.3000e-004**	**0.0000**	**2.3011**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	1.2000e-004	8.0000e-005	9.8000e-004	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3139	0.3139	1.0000e-005	1.0000e-005	0.3164
Total	**1.2000e-004**	**8.0000e-005**	**9.8000e-004**	**0.0000**	**4.3000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3139**	**0.3139**	**1.0000e-005**	**1.0000e-005**	**0.3164**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Diversity

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

Dana Reserve Hotel 2030 - San Luis Obispo 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					
Mitigated	0.3371	0.3763	2.8542	5.4900e-003	0.6740	4.5600e-003	0.6786	0.1800	4.2700e-003	0.1842	0.0000	533.7086	533.7086	0.0351	0.0265	542.4917
Unmitigated	0.3464	0.3947	2.9845	5.8200e-003	0.7167	4.8100e-003	0.7215	0.1913	4.5100e-003	0.1959	0.0000	566.2846	566.2846	0.0365	0.0277	575.4634

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	919.60	900.90	655.60	1,919,910	1,805,675
Total	919.60	900.90	655.60	1,919,910	1,805,675

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
Hotel	13.00	5.00	5.00	19.40	61.60	19.00	90	6	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.516135	0.058853	0.199929	0.136792	0.029532	0.007795	0.008341	0.005917	0.000885	0.000346	0.029869	0.000792	0.004814

5.0 Energy Detail

Historical Energy Use: N

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	25.0453	25.0453	4.1400e-003	3.9000e-004	25.2663
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	25.5953	25.5953	4.2300e-003	4.0000e-004	25.8211
NaturalGas Mitigated	0.0142	0.1292	0.1085	7.7000e-004		9.8200e-003	9.8200e-003		9.8200e-003	9.8200e-003	0.0000	140.5923	140.5923	2.6900e-003	2.5800e-003	141.4278
NaturalGas Unmitigated	0.0142	0.1292	0.1085	7.7000e-004		9.8200e-003	9.8200e-003		9.8200e-003	9.8200e-003	0.0000	140.5923	140.5923	2.6900e-003	2.5800e-003	141.4278

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					
Hotel	2.6346e+006	0.0142	0.1292	0.1085	7.7000e-004		9.8200e-003	9.8200e-003		9.8200e-003	9.8200e-003	0.0000	140.5923	140.5923	2.6900e-003	2.5800e-003	141.4278
Total		**0.0142**	**0.1292**	**0.1085**	**7.7000e-004**		**9.8200e-003**	**9.8200e-003**		**9.8200e-003**	**9.8200e-003**	**0.0000**	**140.5923**	**140.5923**	**2.6900e-003**	**2.5800e-003**	**141.4278**

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					
Hotel	2.6346e+006	0.0142	0.1292	0.1085	7.7000e-004		9.8200e-003	9.8200e-003		9.8200e-003	9.8200e-003	0.0000	140.5923	140.5923	2.6900e-003	2.5800e-003	141.4278
Total		**0.0142**	**0.1292**	**0.1085**	**7.7000e-004**		**9.8200e-003**	**9.8200e-003**		**9.8200e-003**	**9.8200e-003**	**0.0000**	**140.5923**	**140.5923**	**2.6900e-003**	**2.5800e-003**	**141.4278**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	444000	25.5953	4.2300e-003	4.0000e-004	25.8211
Total		**25.5953**	**4.2300e-003**	**4.0000e-004**	**25.8211**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	434460	25.0453	4.1400e-003	3.9000e-004	25.2663
Total		**25.0453**	**4.1400e-003**	**3.9000e-004**	**25.2663**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.2484	2.0000e-005	1.8400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6000e-003	3.6000e-003	1.0000e-005	0.0000	3.8400e-003
Unmitigated	0.3040	2.0000e-005	1.8400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6000e-003	3.6000e-003	1.0000e-005	0.0000	3.8400e-003

Dana Reserve Hotel 2030 - San Luis Obispo 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	0.0695					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2343					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7000e-004	2.0000e-005	1.8400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6000e-003	3.6000e-003	1.0000e-005	0.0000	3.8400e-003
Total	**0.3040**	**2.0000e-005**	**1.8400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.6000e-003**	**3.6000e-003**	**1.0000e-005**	**0.0000**	**3.8400e-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	0.0139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2343					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7000e-004	2.0000e-005	1.8400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.6000e-003	3.6000e-003	1.0000e-005	0.0000	3.8400e-003
Total	**0.2484**	**2.0000e-005**	**1.8400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.6000e-003**	**3.6000e-003**	**1.0000e-005**	**0.0000**	**3.8400e-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

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	1.5405	0.0769	1.8200e-003	4.0060
Unmitigated	1.8182	0.0911	2.1600e-003	4.7393

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	2.79034 / 0.310038	1.8182	0.0911	2.1600e-003	4.7393
Total		**1.8182**	**0.0911**	**2.1600e-003**	**4.7393**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	2.35505 / 0.291126	1.5405	0.0769	1.8200e-003	4.0060
Total		**1.5405**	**0.0769**	**1.8200e-003**	**4.0060**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.1131	0.3613	0.0000	15.1449
Unmitigated	12.2262	0.7225	0.0000	30.2898

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			
Hotel	60.23	12.2262	0.7225	0.0000	30.2898
Total		**12.2262**	**0.7225**	**0.0000**	**30.2898**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	30.115	6.1131	0.3613	0.0000	15.1449
Total		**6.1131**	**0.3613**	**0.0000**	**15.1449**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Dana Reserve Hotel 2030 - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dana Reserve Hotel 2030

San Luis Obispo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	110.00	Room	3.67	60,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
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 - Utility intensity factor is based on renewable portfolio standars for PG&E in year 2030

Land Use - As per traffic report the hotel is 110 rooms and as per buildout schedule the hotel will be 60,000sqft.

Construction Phase - Demo, site prep, and grading will be completed at start of residential and so are not accounted for in this model run.

Off-road Equipment - Defualt

Off-road Equipment - Defualt

Off-road Equipment - Defualt

Vehicle Trips - Weekday and sunday trip generation is based on traffic report. Trip type is based on traffic report.

Construction Off-road Equipment Mitigation - Tier 3 engines, soil stabilizers, water exposed areas 3 times per day, and a speed limit of 15mph on unpaved roads.

Mobile Land Use Mitigation -

Area Mitigation - Use low VOC paints (50g/L)

Energy Mitigation -

Dana Reserve Hotel 2030 - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	150	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Dana Reserve Hotel 2030 - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblLandUse	LandUseSquareFeet	159,720.00	60,000.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.021
tblProjectCharacteristics	CO2IntensityFactor	203.98	127.09
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.002
tblVehicleTrips	DV_TP	38.00	6.00
tblVehicleTrips	PR_TP	58.00	90.00
tblVehicleTrips	SU_TR	5.95	5.96

2.0 Emissions Summary

Dana Reserve Hotel 2030 - San Luis Obispo 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					
2026	78.3072	20.4463	29.3911	0.0507	0.4914	0.8840	1.3753	0.1314	0.8260	0.9573	0.0000	4,871.3312	4,871.3312	1.1793	0.0302	4,909.7997
Maximum	**78.3072**	**20.4463**	**29.3911**	**0.0507**	**0.4914**	**0.8840**	**1.3753**	**0.1314**	**0.8260**	**0.9573**	**0.0000**	**4,871.3312**	**4,871.3312**	**1.1793**	**0.0302**	**4,909.7997**

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					
2026	77.8149	23.7594	32.5347	0.0507	0.4914	1.4322	1.9235	0.1314	1.4319	1.5633	0.0000	4,871.3312	4,871.3312	1.1793	0.0302	4,909.7997
Maximum	**77.8149**	**23.7594**	**32.5347**	**0.0507**	**0.4914**	**1.4322**	**1.9235**	**0.1314**	**1.4319**	**1.5633**	**0.0000**	**4,871.3312**	**4,871.3312**	**1.1793**	**0.0302**	**4,909.7997**

	ROG	NOx	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	**0.63**	**-16.20**	**-10.70**	**0.00**	**0.00**	**-62.01**	**-39.86**	**0.00**	**-73.37**	**-63.30**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Dana Reserve Hotel 2030 - San Luis Obispo 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	1.6660	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Energy	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
Mobile	2.0964	2.1268	16.5225	0.0344	4.2285	0.0277	4.2562	1.1266	0.0260	1.1526		3,687.1281	3,687.1281	0.2185	0.1685	3,742.7925
Total	**3.8402**	**2.8345**	**17.1281**	**0.0386**	**4.2285**	**0.0815**	**4.3100**	**1.1266**	**0.0798**	**1.2064**		**4,536.3383**	**4,536.3383**	**0.2349**	**0.1840**	**4,597.0505**

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	1.3612	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Energy	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
Mobile	2.0441	2.0273	15.7684	0.0324	3.9769	0.0262	4.0032	1.0596	0.0246	1.0842		3,474.7431	3,474.7431	0.2103	0.1610	3,527.9846
Total	**3.4832**	**2.7350**	**16.3740**	**0.0366**	**3.9769**	**0.0800**	**4.0570**	**1.0596**	**0.0784**	**1.1380**		**4,323.9533**	**4,323.9533**	**0.2267**	**0.1766**	**4,382.2427**

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	9.30	3.51	4.40	5.13	5.95	1.80	5.87	5.95	1.73	5.67	0.00	4.68	4.68	3.50	4.04	4.67

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2026	11/18/2026	5	230	
2	Paving	Paving	11/2/2026	11/25/2026	5	18	
3	Architectural Coating	Architectural Coating	11/23/2026	12/16/2026	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 90,000; Non-Residential Outdoor: 30,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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
Building Construction	9	25.00	10.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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**

Dana Reserve Hotel 2030 - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0108	0.3763	0.1241	1.4100e-003	0.0465	2.1800e-003	0.0487	0.0134	2.0900e-003	0.0155		150.9989	150.9989	3.6900e-003	0.0221	157.6846
Worker	0.0666	0.0379	0.5581	1.9000e-003	0.2472	1.0200e-003	0.2482	0.0656	9.4000e-004	0.0665		199.1474	199.1474	4.0800e-003	4.4600e-003	200.5795
Total	**0.0774**	**0.4143**	**0.6822**	**3.3100e-003**	**0.2936**	**3.2000e-003**	**0.2968**	**0.0789**	**3.0300e-003**	**0.0820**		**350.1464**	**350.1464**	**7.7700e-003**	**0.0266**	**358.2640**

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0108	0.3763	0.1241	1.4100e-003	0.0465	2.1800e-003	0.0487	0.0134	2.0900e-003	0.0155		150.9989	150.9989	3.6900e-003	0.0221	157.6846
Worker	0.0666	0.0379	0.5581	1.9000e-003	0.2472	1.0200e-003	0.2482	0.0656	9.4000e-004	0.0665		199.1474	199.1474	4.0800e-003	4.4600e-003	200.5795
Total	**0.0774**	**0.4143**	**0.6822**	**3.3100e-003**	**0.2936**	**3.2000e-003**	**0.2968**	**0.0789**	**3.0300e-003**	**0.0820**		**350.1464**	**350.1464**	**7.7700e-003**	**0.0266**	**358.2640**

3.3 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	0.8197	7.5321	12.1778	0.0189		0.3524	0.3524		0.3259	0.3259		1,805.3926	1,805.3926	0.5673		1,819.5741
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8197**	**7.5321**	**12.1778**	**0.0189**		**0.3524**	**0.3524**		**0.3259**	**0.3259**		**1,805.3926**	**1,805.3926**	**0.5673**		**1,819.5741**

Dana Reserve Hotel 2030 - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 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	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	0.0533	0.0303	0.4465	1.5200e-003	0.1977	8.2000e-004	0.1985	0.0524	7.6000e-004	0.0532		159.3179	159.3179	3.2700e-003	3.5700e-003	160.4636
Total	**0.0533**	**0.0303**	**0.4465**	**1.5200e-003**	**0.1977**	**8.2000e-004**	**0.1985**	**0.0524**	**7.6000e-004**	**0.0532**		**159.3179**	**159.3179**	**3.2700e-003**	**3.5700e-003**	**160.4636**

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	0.4389	9.0888	13.5323	0.0189		0.5246	0.5246		0.5246	0.5246	0.0000	1,805.3926	1,805.3926	0.5673		1,819.5741
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4389**	**9.0888**	**13.5323**	**0.0189**		**0.5246**	**0.5246**		**0.5246**	**0.5246**	**0.0000**	**1,805.3926**	**1,805.3926**	**0.5673**		**1,819.5741**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 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	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	0.0533	0.0303	0.4465	1.5200e-003	0.1977	8.2000e-004	0.1985	0.0524	7.6000e-004	0.0532		159.3179	159.3179	3.2700e-003	3.5700e-003	160.4636
Total	**0.0533**	**0.0303**	**0.4465**	**1.5200e-003**	**0.1977**	**8.2000e-004**	**0.1985**	**0.0524**	**7.6000e-004**	**0.0532**		**159.3179**	**159.3179**	**3.2700e-003**	**3.5700e-003**	**160.4636**

3.4 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	77.2500					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	**77.4209**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0133	7.5900e-003	0.1116	3.8000e-004	0.0494	2.0000e-004	0.0496	0.0131	1.9000e-004	0.0133		39.8295	39.8295	8.2000e-004	8.9000e-004	40.1159
Total	**0.0133**	**7.5900e-003**	**0.1116**	**3.8000e-004**	**0.0494**	**2.0000e-004**	**0.0496**	**0.0131**	**1.9000e-004**	**0.0133**		**39.8295**	**39.8295**	**8.2000e-004**	**8.9000e-004**	**40.1159**

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	77.2500					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**77.3094**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0133	7.5900e-003	0.1116	3.8000e-004	0.0494	2.0000e-004	0.0496	0.0131	1.9000e-004	0.0133		39.8295	39.8295	8.2000e-004	8.9000e-004	40.1159
Total	**0.0133**	**7.5900e-003**	**0.1116**	**3.8000e-004**	**0.0494**	**2.0000e-004**	**0.0496**	**0.0131**	**1.9000e-004**	**0.0133**		**39.8295**	**39.8295**	**8.2000e-004**	**8.9000e-004**	**40.1159**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Diversity

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

Dana Reserve Hotel 2030 - San Luis Obispo 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0441	2.0273	15.7684	0.0324	3.9769	0.0262	4.0032	1.0596	0.0246	1.0842		3,474.7431	3,474.7431	0.2103	0.1610	3,527.9846
Unmitigated	2.0964	2.1268	16.5225	0.0344	4.2285	0.0277	4.2562	1.1266	0.0260	1.1526		3,687.1281	3,687.1281	0.2185	0.1685	3,742.7925

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	919.60	900.90	655.60	1,919,910	1,805,675
Total	919.60	900.90	655.60	1,919,910	1,805,675

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
Hotel	13.00	5.00	5.00	19.40	61.60	19.00	90	6	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.516135	0.058853	0.199929	0.136792	0.029532	0.007795	0.008341	0.005917	0.000885	0.000346	0.029869	0.000792	0.004814

5.0 Energy Detail

Historical Energy Use: N

Dana Reserve Hotel 2030 - San Luis Obispo 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

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
NaturalGas Unmitigated	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324

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					
Hotel	7218.08	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
Total		**0.0778**	**0.7077**	**0.5944**	**4.2500e-003**		**0.0538**	**0.0538**		**0.0538**	**0.0538**		**849.1861**	**849.1861**	**0.0163**	**0.0156**	**854.2324**

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	lb/day										lb/day					
Hotel	7.21808	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
Total		**0.0778**	**0.7077**	**0.5944**	**4.2500e-003**		**0.0538**	**0.0538**		**0.0538**	**0.0538**		**849.1861**	**849.1861**	**0.0163**	**0.0156**	**854.2324**

6.0 Area Detail

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

Dana Reserve Hotel 2030 - San Luis Obispo 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3612	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Unmitigated	1.6660	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256

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	0.3810					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2840					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0200e-003	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Total	**1.6660**	**1.0000e-004**	**0.0112**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0241**	**0.0241**	**6.0000e-005**		**0.0256**

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	0.0762					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2840					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0200e-003	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Total	**1.3612**	**1.0000e-004**	**0.0112**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0241**	**0.0241**	**6.0000e-005**		**0.0256**

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

Dana Reserve Hotel 2030 - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dana Reserve Hotel 2030

San Luis Obispo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	110.00	Room	3.67	60,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
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 - Utility intensity factor is based on renewable portfolio standars for PG&E in year 2030

Land Use - As per traffic report the hotel is 110 rooms and as per buildout schedule the hotel will be 60,000sqft.

Construction Phase - Demo, site prep, and grading will be completed at start of residential and so are not accounted for in this model run.

Off-road Equipment - Defualt

Off-road Equipment - Defualt

Off-road Equipment - Defualt

Vehicle Trips - Weekday and sunday trip generation is based on traffic report. Trip type is based on traffic report.

Construction Off-road Equipment Mitigation - Tier 3 engines, soil stabilizers, water exposed areas 3 times per day, and a speed limit of 15mph on unpaved roads.

Mobile Land Use Mitigation -

Area Mitigation - Use low VOC paints (50g/L)

Energy Mitigation -

Dana Reserve Hotel 2030 - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	150	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Dana Reserve Hotel 2030 - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblLandUse	LandUseSquareFeet	159,720.00	60,000.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.021
tblProjectCharacteristics	CO2IntensityFactor	203.98	127.09
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.002
tblVehicleTrips	DV_TP	38.00	6.00
tblVehicleTrips	PR_TP	58.00	90.00
tblVehicleTrips	SU_TR	5.95	5.96

2.0 Emissions Summary

Dana Reserve Hotel 2030 - San Luis Obispo 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					
2026	78.3148	20.4687	29.3770	0.0506	0.4914	0.8840	1.3753	0.1314	0.8260	0.9574	0.0000	4,856.6968	4,856.6968	1.1799	0.0309	4,895.4085
Maximum	**78.3148**	**20.4687**	**29.3770**	**0.0506**	**0.4914**	**0.8840**	**1.3753**	**0.1314**	**0.8260**	**0.9574**	**0.0000**	**4,856.6968**	**4,856.6968**	**1.1799**	**0.0309**	**4,895.4085**

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					
2026	77.8225	23.7818	32.5207	0.0506	0.4914	1.4322	1.9236	0.1314	1.4320	1.5633	0.0000	4,856.6968	4,856.6968	1.1799	0.0309	4,895.4085
Maximum	**77.8225**	**23.7818**	**32.5207**	**0.0506**	**0.4914**	**1.4322**	**1.9236**	**0.1314**	**1.4320**	**1.5633**	**0.0000**	**4,856.6968**	**4,856.6968**	**1.1799**	**0.0309**	**4,895.4085**

	ROG	NOx	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	**0.63**	**-16.19**	**-10.70**	**0.00**	**0.00**	**-62.01**	**-39.86**	**0.00**	**-73.37**	**-63.30**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Dana Reserve Hotel 2030 - San Luis Obispo 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	1.6660	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Energy	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
Mobile	2.0196	2.2905	17.7139	0.0333	4.2285	0.0277	4.2562	1.1266	0.0260	1.1526		3,573.5074	3,573.5074	0.2376	0.1780	3,632.4841
Total	**3.7634**	**2.9983**	**18.3195**	**0.0376**	**4.2285**	**0.0815**	**4.3101**	**1.1266**	**0.0798**	**1.2064**		**4,422.7176**	**4,422.7176**	**0.2540**	**0.1935**	**4,486.7422**

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	1.3612	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Energy	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
Mobile	1.9649	2.1845	16.9530	0.0314	3.9769	0.0262	4.0032	1.0596	0.0246	1.0842		3,368.0259	3,368.0259	0.2292	0.1702	3,424.4841
Total	**3.4040**	**2.8922**	**17.5586**	**0.0357**	**3.9769**	**0.0801**	**4.0570**	**1.0596**	**0.0784**	**1.1380**		**4,217.2361**	**4,217.2361**	**0.2456**	**0.1858**	**4,278.7421**

Dana Reserve Hotel 2030 - San Luis Obispo 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	9.55	3.54	4.15	5.11	5.95	1.80	5.87	5.95	1.73	5.67	0.00	4.65	4.65	3.31	4.00	4.64

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2026	11/18/2026	5	230	
2	Paving	Paving	11/2/2026	11/25/2026	5	18	
3	Architectural Coating	Architectural Coating	11/23/2026	12/16/2026	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 90,000; Non-Residential Outdoor: 30,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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
Building Construction	9	25.00	10.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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**

Dana Reserve Hotel 2030 - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0105	0.3895	0.1290	1.4100e-003	0.0465	2.2000e-003	0.0487	0.0134	2.1000e-003	0.0155		151.2854	151.2854	3.6700e-003	0.0222	157.9885
Worker	0.0742	0.0431	0.5476	1.8200e-003	0.2472	1.0200e-003	0.2482	0.0656	9.4000e-004	0.0665		190.8580	190.8580	4.4300e-003	4.8500e-003	192.4155
Total	**0.0846**	**0.4325**	**0.6765**	**3.2300e-003**	**0.2936**	**3.2200e-003**	**0.2969**	**0.0789**	**3.0400e-003**	**0.0820**		**342.1434**	**342.1434**	**8.1000e-003**	**0.0270**	**350.4040**

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	0.6739	14.2261	17.8738	0.0270		0.9036	0.9036		0.9036	0.9036	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.6739**	**14.2261**	**17.8738**	**0.0270**		**0.9036**	**0.9036**		**0.9036**	**0.9036**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 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	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	0.0105	0.3895	0.1290	1.4100e-003	0.0465	2.2000e-003	0.0487	0.0134	2.1000e-003	0.0155		151.2854	151.2854	3.6700e-003	0.0222	157.9885
Worker	0.0742	0.0431	0.5476	1.8200e-003	0.2472	1.0200e-003	0.2482	0.0656	9.4000e-004	0.0665		190.8580	190.8580	4.4300e-003	4.8500e-003	192.4155
Total	**0.0846**	**0.4325**	**0.6765**	**3.2300e-003**	**0.2936**	**3.2200e-003**	**0.2969**	**0.0789**	**3.0400e-003**	**0.0820**		**342.1434**	**342.1434**	**8.1000e-003**	**0.0270**	**350.4040**

3.3 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	0.8197	7.5321	12.1778	0.0189		0.3524	0.3524		0.3259	0.3259		1,805.3926	1,805.3926	0.5673		1,819.5741
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8197**	**7.5321**	**12.1778**	**0.0189**		**0.3524**	**0.3524**		**0.3259**	**0.3259**		**1,805.3926**	**1,805.3926**	**0.5673**		**1,819.5741**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 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	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	0.0593	0.0345	0.4381	1.4500e-003	0.1977	8.2000e-004	0.1985	0.0524	7.6000e-004	0.0532		152.6864	152.6864	3.5400e-003	3.8800e-003	153.9324
Total	**0.0593**	**0.0345**	**0.4381**	**1.4500e-003**	**0.1977**	**8.2000e-004**	**0.1985**	**0.0524**	**7.6000e-004**	**0.0532**		**152.6864**	**152.6864**	**3.5400e-003**	**3.8800e-003**	**153.9324**

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	0.4389	9.0888	13.5323	0.0189		0.5246	0.5246		0.5246	0.5246	0.0000	1,805.3926	1,805.3926	0.5673		1,819.5741
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4389**	**9.0888**	**13.5323**	**0.0189**		**0.5246**	**0.5246**		**0.5246**	**0.5246**	**0.0000**	**1,805.3926**	**1,805.3926**	**0.5673**		**1,819.5741**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Paving - 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	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	0.0593	0.0345	0.4381	1.4500e-003	0.1977	8.2000e-004	0.1985	0.0524	7.6000e-004	0.0532		152.6864	152.6864	3.5400e-003	3.8800e-003	153.9324
Total	**0.0593**	**0.0345**	**0.4381**	**1.4500e-003**	**0.1977**	**8.2000e-004**	**0.1985**	**0.0524**	**7.6000e-004**	**0.0532**		**152.6864**	**152.6864**	**3.5400e-003**	**3.8800e-003**	**153.9324**

3.4 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	77.2500					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	**77.4209**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 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	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	0.0148	8.6100e-003	0.1095	3.6000e-004	0.0494	2.0000e-004	0.0496	0.0131	1.9000e-004	0.0133		38.1716	38.1716	8.9000e-004	9.7000e-004	38.4831
Total	**0.0148**	**8.6100e-003**	**0.1095**	**3.6000e-004**	**0.0494**	**2.0000e-004**	**0.0496**	**0.0131**	**1.9000e-004**	**0.0133**		**38.1716**	**38.1716**	**8.9000e-004**	**9.7000e-004**	**38.4831**

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	77.2500					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**77.3094**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.4 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	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	0.0148	8.6100e-003	0.1095	3.6000e-004	0.0494	2.0000e-004	0.0496	0.0131	1.9000e-004	0.0133		38.1716	38.1716	8.9000e-004	9.7000e-004	38.4831
Total	**0.0148**	**8.6100e-003**	**0.1095**	**3.6000e-004**	**0.0494**	**2.0000e-004**	**0.0496**	**0.0131**	**1.9000e-004**	**0.0133**		**38.1716**	**38.1716**	**8.9000e-004**	**9.7000e-004**	**38.4831**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Diversity

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

Dana Reserve Hotel 2030 - San Luis Obispo 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9649	2.1845	16.9530	0.0314	3.9769	0.0262	4.0032	1.0596	0.0246	1.0842		3,368.0259	3,368.0259	0.2292	0.1702	3,424.4841
Unmitigated	2.0196	2.2905	17.7139	0.0333	4.2285	0.0277	4.2562	1.1266	0.0260	1.1526		3,573.5074	3,573.5074	0.2376	0.1780	3,632.4841

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	919.60	900.90	655.60	1,919,910	1,805,675
Total	919.60	900.90	655.60	1,919,910	1,805,675

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
Hotel	13.00	5.00	5.00	19.40	61.60	19.00	90	6	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.516135	0.058853	0.199929	0.136792	0.029532	0.007795	0.008341	0.005917	0.000885	0.000346	0.029869	0.000792	0.004814

5.0 Energy Detail

Historical Energy Use: N

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
NaturalGas Unmitigated	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324

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					
Hotel	7218.08	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
Total		**0.0778**	**0.7077**	**0.5944**	**4.2500e-003**		**0.0538**	**0.0538**		**0.0538**	**0.0538**		**849.1861**	**849.1861**	**0.0163**	**0.0156**	**854.2324**

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	lb/day										lb/day					
Hotel	7.21808	0.0778	0.7077	0.5944	4.2500e-003		0.0538	0.0538		0.0538	0.0538		849.1861	849.1861	0.0163	0.0156	854.2324
Total		**0.0778**	**0.7077**	**0.5944**	**4.2500e-003**		**0.0538**	**0.0538**		**0.0538**	**0.0538**		**849.1861**	**849.1861**	**0.0163**	**0.0156**	**854.2324**

6.0 Area Detail

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

Dana Reserve Hotel 2030 - San Luis Obispo 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3612	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Unmitigated	1.6660	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256

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	0.3810					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2840					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0200e-003	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Total	**1.6660**	**1.0000e-004**	**0.0112**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0241**	**0.0241**	**6.0000e-005**		**0.0256**

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	0.0762					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2840					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0200e-003	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0256
Total	**1.3612**	**1.0000e-004**	**0.0112**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0241**	**0.0241**	**6.0000e-005**		**0.0256**

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

APPENDIX E

Biological Resources Background Information

Biological Report for the Dana Reserve Specific Plan

Biological Report

for

Dana Reserve Specific Plan

Master Vesting Tentative Tract Map 3159
APNs 091-301-029, -030, -031 and -073
Nipomo, San Luis Obispo County




Prepared for

Dana Reserve, LLC
684 Higuera St., Ste. B
San Luis Obispo, CA 93401
(805) 541-9004

By

ALTHOUSE AND MEADE, INC.
BIOLOGICAL AND ENVIRONMENTAL SERVICES
1602 Spring Street
Paso Robles, CA 93446
(805) 237-9626

September 2021 – Version 2
Corrections April 2022

Reporting Biologist: LynneDee Althouse
Principal Scientist
Althouse and Meade, Inc.
1602 Spring Street
Paso Robles, CA 93446
(805) 237-9626
LD@althouseandmeade.com

As a County-approved biologist, I hereby certify that this Biological Resources Assessment was prepared according to the Guidelines established by the County of San Luis Obispo Department of Planning and Building and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge and belief; and I further certify that we were present throughout the period of site visit(s) associated with this report.

LynneDee Althouse
Principal Scientist

10/26/2021
Technical Edits
Reviewed 4/12/2022
Date

Adam Searcy
Sr. Biologist

10/26/2021
Date

Kyle Nessen
GIS Specialist

10/13/2021
Date

Cover Page: Top photos of Pismo clarkia and coast live oaks June 12 2018; bottom photos of California spineflower patch with doveweed June 12, 2018 (left); Burton mesa chaparral condition with chamise as dominant species on June 19, 2020. Photos by LynneDee Althouse and Sarah Termondt.

Table of Contents

List of Tables

List of Figures

List of Appendices

SYNOPSIS

- This report describes biological resources on a 295.3-acre site (Study Area) located in the unincorporated community of Nipomo, San Luis Obispo County, and is comprised of Assessor's Parcel Numbers (APNs) 091-301-030, -031, and -073.
- The proposed residential and commercial development (Project) includes 1,270 housing units (multi- and single-family) in 12 neighborhoods, commercial business spaces (Village Commercial), a hotel, parks, public recreation areas, horse trails and a neighborhood barn, and an education center.
- Seven habitat types identified and mapped in the Study Area consist of coast live oak forest (coast live oak/poison oak association), coast live oak woodland (coast live oak/chamise-black sage association), Burton Mesa chaparral, California perennial grassland group, Mediterranean California naturalized perennial grassland group, annual brome grasslands, and developed anthropogenic areas. No wetlands or waters of the U.S. or state were detected.
- The Project proposes to impact a total of 266.5 acres comprised of the following habitat types: 21.7 acres of coast live oak forest, 75.3 acres of coast live oak woodland, 35 acres of Burton Mesa chaparral, 125acres of California perennial grassland group, 3.6 acres of Mediterranean California naturalized perennial grassland group, and 7.3 acres of annual brome grassland. Approximately 21.9 acres will be preserved onsite in a biological open space easement that includes 17 acres of coast live oak forest, 3.0 acres of coast live oak woodland, 1.0 acre of California perennial grassland group, and 0.9 acre of Burton Mesa chaparral. The Project area is 288.4 acres.
- The Alternative project, also 288.4 acres, involves modified access from Willow Road, and a reduced impact lot layout. The Alternative would impact 256.3 acres, comprised of 15.3 coast live oak forest, 70.0 acres of coast live oak woodland, 34.9 acres of Burton Mesa chaparral, 124.2 acres of California perennial grassland group, 3.6 acres of Mediterranean California naturalized perennial grassland group, and 7.3 acres of annual brome grassland. Approximately 32.1 acres would be preserved onsite in a biological open space easement, which includes 20.8 acres of coast live oak forest, 8.4 acres of coast live oak woodland, 1.8 acres of California perennial grassland group, and 1.0 acre of Burton Mesa chaparral.
- Mitigation measures are proposed to reduce project impacts to sensitive habitat types such as Burton Mesa chaparral, coast live oak woodland and forest.
- Floristically timed botanical surveys conducted from 2017 to 2021 identified 159 vascular plant taxa in the Study Area. Habitat and soil conditions are suitable for 18 special status plants. Eight (8) special status plant species were detected in the Study Area.
    - One federal and state listed plant species, Pismo Clarkia (*Clarkia speciosa* ssp. *immaculata*) was detected in the Study Area. Most of the occupied habitat will be avoided.
    - An Incidental Take Permit (ITP) with the California Department of Fish and Wildlife (CDFW) is required for any proposed impacts to Pismo clarkia.

  - The Project proposes to impact sensitive botanical resources, including ~37 individuals of Pismo clarkia, approximately 7,000 individuals of mesa horkelia, 324 individuals of sand mesa manzanita, 50 individuals of Nipomo mesa ceanothus, 155 individuals of sand almond, 21 individuals of sand buck brush, and 42.6 acres California spine flower. Onsite and offsite mitigation measures are provided with mitigation ratios dependent on the level of species rarity and threat ranking.

- Wildlife species detected in the Study Area include 10 invertebrates, 4 reptiles, no amphibians, 67 birds, and 17 mammals. Appropriate habitat is present on the property for 18 special status animals; coast horned lizard, American badger, and several sensitive bird and bat species were detected. No state or federally listed animals were detected in the Study Area.
- The Project proposes to impact wildlife resources through direct mortality, loss of habitat, and reduction of movement corridors. Mitigation measures are proposed to reduce impacts to sensitive wildlife, including bird and raptor avoidance measures during nesting season.

1 INTRODUCTION

1.1 Purpose

This Biological Report provides information regarding biological resources associated with Dana Reserve, a 295.3-acre site (Study Area) in San Luis Obispo County, California. Results include a habitat assessment, botanical and wildlife inventory, a discussion of special status species that have potential to occur within the Study Area, and an analysis of potential impacts to biological resources from the proposed subdivision (Project) and the Alternative. Mitigation recommendations for proposed impacts to biological resources are also provided.

1.2 Project Location

The Dana Reserve Study Area is in southwest San Luis Obispo County, immediately west of U.S. Highway 101, south of Willow Road, and is accessible from Cherokee Place. Approximate coordinates for the center of the Study Area are 120.50381°W, 35.06157°N (WGS84) in the Oceano and Nipomo United States Geological Survey (USGS) 7.5-minute topographic quadrangles (Figure 1).

The Study Area includes a total of four parcels equivalent to approximately 295 acres. As shown in Figure 2, the largest parcel is 274.6 acres, while the other three parcels are divided (relatively) equally by the remaining acreage, approximately 7 acres each. The three smaller parcels (APNs 091-301-029, -030, and -031) are located northwest of Cherokee Place and the largest parcel, APN 091-301-073, is located southeast of Cherokee Place. Proposed access from Willow Road is from Parcels -031 and -030. Parcel -029 is an alternative to Parcel -030 access from Willow Road.

1.2.1 Local and Regional Context

The Study Area is situated approximately seven miles southeast of the City of Arroyo Grande and seven miles east of the Pacific Ocean on the Nipomo Mesa. The Dana Foothills to the east form the southernmost edge of the Santa Lucia Mountain range that transitions to the Santa Maria Valley to the south. The Nipomo Mesa landform was created by westerly winds blowing sand that established dunes from Pleistocene beaches thousands of years ago. Nipomo Creek is located offsite and to the east of Highway 101. Dana Reserve is located just outside the northern limits of the Nipomo Urban Reserve Line (San Luis Obispo County 2017b). Elevations range from approximately 343 to 420 feet above mean sea level with the lowest point adjacent to Pomeroy Road in the southwest corner of the property.

Surrounding land uses are mixed. North/northeast is U.S. Highway 101 bordered by commercial agricultural greenhouse and nursery operations. North/northwest land use is rural residential with confined animals (cattle, goats, horses, chickens, and various other fowl). South of Hetrick Avenue and Pomeroy Road most suburban lots contain single-family homes. To the east/southeast most rural residential/suburban lots contain single family homes (Figure 2).

1.3 Project Description

The Project is being proposed by Dana Reserve, LLC represented by Nick Tompkins for approval of a Specific Plan, Vesting Master Tentative Tract Map (V M TTM) 3159 and associate entitlements, as illustrated on the Overall Site Plan (Appendix A).

The Project proposes to subdivide 288.4-acres (Parcels 091-301-073, -031 and -030) into 20 private lots and 19 public lots. The private lots will be a mixture of multi-family and single-family residences, and commercial land uses equivalent to 201 acres (Lots 1 through 20). The public lots are comprised of roads, open space, recreation, and drainage basins equivalent to 88.3 acres. Approximately 22 acres of oak forest, woodland and adjacent habitats will be preserved as open space.

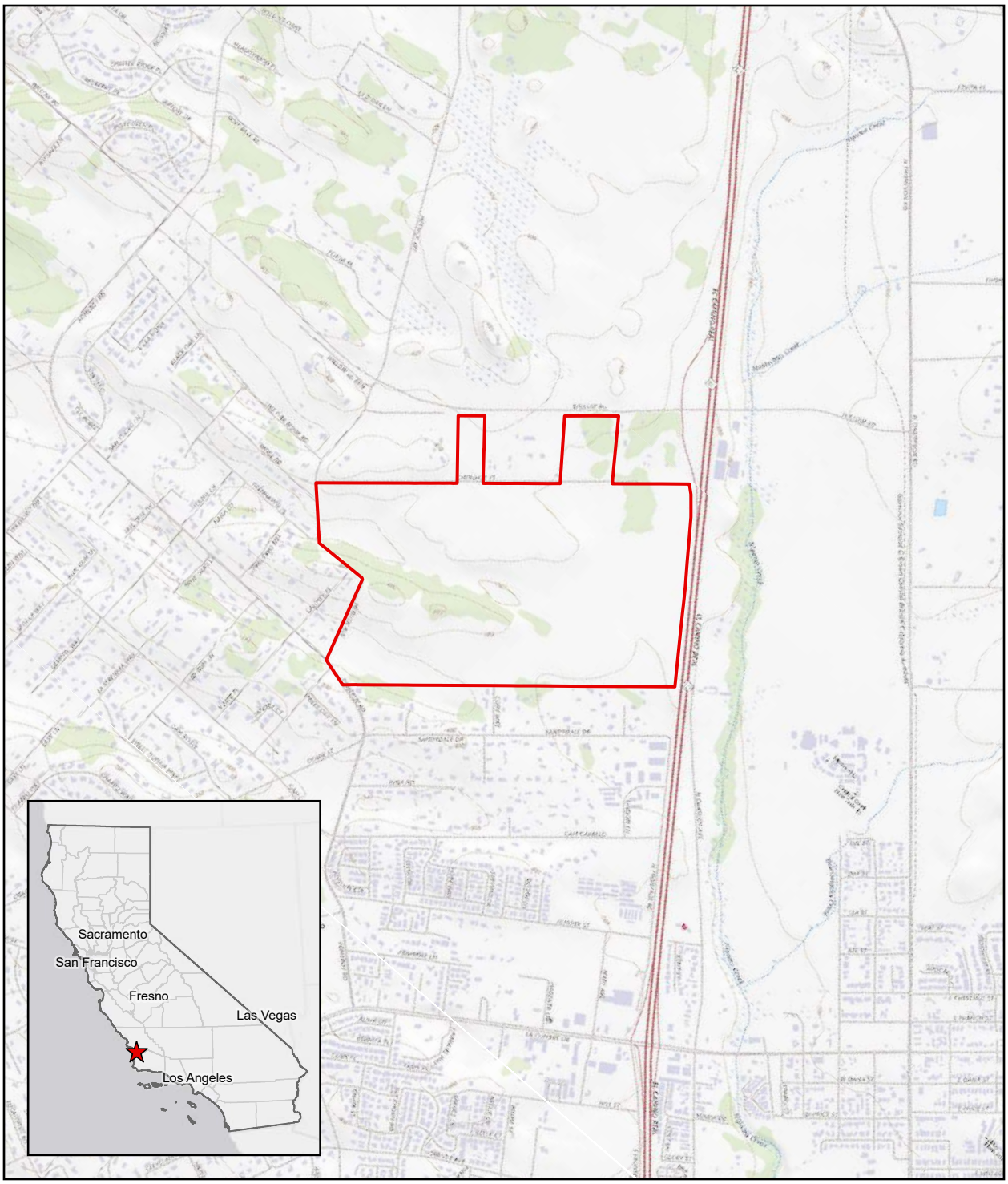
An Alternative project (Alternative) would similarly subdivide 288.4 acres (Parcels -091-301-073, -031 and -029), and preserve 32.1 acres of oak forest, woodland and adjacent habitats.

Responsible parties for the Project are listed in Table 1.

TABLE 1. RESPONSIBLE PARTIES

Owner	Planner	Lead Agency
Dana Reserve, LLC 684 Higuera St., Ste. B San Luis Obispo, CA 93401 (805) 541-9004 Contact: Nick Tompkins Nick@nktcommercial.com	**Urban Planning Concepts Inc.** 2624 Airpark Drive Santa Maria, CA 93455 (805) 934-5760 Contact: Laurie Tamura Laurie@urbanplanningconcepts.com	**San Luis Obispo County Department of Planning and Building** 976 Osos Street, Room 300 San Luis Obispo, CA 93408 Contact: Jennifer Guetschow jguetschow@co.slo.ca.us
Biological Consultant	**Land Surveyor**	**Architect and Engineer**
Althouse and Meade, Inc. 1602 Spring Street Paso Robles, CA 93446 (805) 237-9626 Contact: LynneDee Althouse LD@althouseandmeade.com	**MBS Land Surveys** 3559 S Higuera St, San Luis Obispo, CA 93401 (805)-594-1960 Contact: Mike Stanton mstanton@mbslandsurveys.com	**RRM Design Group** 3765 South Higuera St., Ste. 102 San Luis Obispo, CA 93401 (805) 543-1794 Contact: Vic Montgomery, AIA VMontgomery@rrmdesign.com Robert Camacho, P.E. RCamacho@rrmdesign.com

Figure 1. United States Geological Survey Topographic Map



Legend

Study Area

0 1,000 2,000 Feet

Dana Reserve
Map Center: 120.50242°W 35.04545°N
Nipomo, San Luis Obispo County

USGS Quadrangle: Oceano and Nipomo

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Map Updated:
October 06, 2021 12:48 PM by SAF

Figure 2. Aerial Photograph

Legend

Study Area APN

0 500 1,000 Feet

Dana Reserve
Map Center: 120.50308°W 35.04692°N
Nipomo, San Luis Obispo County

Imagery Source: USDA NAIP, 05/21/2020
Althouse & Meade Inc., 05/19/2020

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Map Updated:
October 05, 2021 02:03 PM by SAF

1.4 Regulatory Framework

Standards for environmental protection and restoration, in the form of laws and regulations, are created within three different organizational levels of government: Federal, State, and Local. Entities exist within each level to create and enforce regulations that help ensure protection of specific and pertinent regional issues threatening ecosystems and environments. Regulations applicable to the Project are described in Sections 1.5 to 1.8.

1.5 Federal Laws and Regulations

Endangered Species Act

The federal Endangered Species Act (ESA) provides the legal framework for the listing and protection of species (and their habitats) identified as being endangered or threatened with extinction. "Critical Habitat" is a term within ESA designed to guide actions by federal agencies and is defined as "an area occupied by a species listed as threatened or endangered within which are found physical or geographical features essential to the conservation of the species, or an area not currently occupied by the species which is itself essential to the conservation of the species." Actions that jeopardize endangered or threatened species and/or critical habitat are considered a 'take' under ESA. "Take" under federal definition means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

Projects that would result in "take" of any federally listed threatened or endangered species, or critical habitats, are required to consult with the USFWS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of ESA, depending on the involvement by the federal government in permitting and/or funding of the project. The ESA does not protect plants unless there is a federal nexus. Plants may not be removed from lands under Federal jurisdiction, and activities with a Federal nexus have the consultation requirement described above (16 U.S. Code § 1536 - Interagency cooperation).

Migratory Bird Treaty Act

All migratory, non-game bird species that are native to the U.S. or its territories are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (USFWS 2006), as amended under the Migratory Bird Treaty Reform Act of 2004. The MBTA makes it illegal to purposefully take (pursue, hunt, shoot, wound, kill, trap, capture, or collect) any migratory bird, or the parts, nests, or eggs of such a bird, except under the terms of a valid Federal permit. Migratory non-game native bird species are protected by international treaty under the federal MBTA.

1.6 State Laws and Regulations

California Endangered Species Act

The California Endangered Species Act (CESA), like the federal ESA, contains a process for listing of species and regulating potential impacts to listed species. State threatened and endangered species include both plants and wildlife, but do not include invertebrates. The designation "rare species" applies only to California native plants. State threatened and endangered plant species are regulated largely under the Native Plant Preservation Act in conjunction with the CESA. State threatened and endangered animal species are legally protected against "take." The

CESA authorizes the California Department of Fish and Wildlife (CDFW) to enter into a memorandum of agreement for take of listed species to issue an incidental take permit for a state-listed threatened and endangered species only if specific criteria are met. Section 2080 of the CESA prohibits the take of species listed as threatened or endangered pursuant to the Act. Section 2081 allows CDFW to authorize take prohibited under Section 2080 provided that: 1) the taking is incidental to an otherwise lawful activity; 2) the taking will be minimized and fully mitigated; 3) the applicant ensures adequate funding for minimization and mitigation; and 4) the authorization will not jeopardize the continued existence of the listed species.

California Environmental Quality Act (CEQA)

CEQA defines a "project" as any action undertaken from a public or private entity that requires discretionary governmental review (a non-ministerial permittable action). All "projects" are required to undergo some level of environmental review pursuant to CEQA unless an exemption applies. CEQA's environmental review process includes an assessment of existing resources, broken up by categories (i.e., air quality, aesthetics, etc.), a catalog of potential impacts to those resources caused by the proposed project, and a quantifiable result determining the level of significance an impact would generate. The goal of environmental review under CEQA is to avoid or mitigate impacts that would lead to a "significant effect" on a given resource; section 15382 of the CEQA Guidelines defines "significant effect" as:

> *a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment but may be considered in determining whether the physical change is significant.*

Public agencies are required to implement CEQA and execute jurisdiction to determine when applicable activities are or are not subject to CEQA. A public agency with the most prominent nexus and jurisdiction to a project is called the lead agency. Lead agencies determine the scope of what is considered an impact and what constitutes a "significant effect". "Biological resources" is one of the varying categories considered during environmental review through CEQA. A lead agency can require a biological assessment to be prepared to report on existing biological resources and recommended mitigation measures that will reduce or lessen potential negative impacts to those biological resources. Questions listed in CEQA's Appendix G Biological Resources section are used to guide assessment of impacts to biological resources as follows:

- *Does the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*
- *Does the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*
- *Does the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

- *Does the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*
- *Does the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*
- *Does the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Section 15065 "Mandatory Findings of Significance" provides that a significant environmental effect occurs where a project has the potential to:

- *substantially reduce the habitat of a fish or wildlife species;*
- *cause a fish or wildlife population to drop below self-sustaining levels;*
- *threaten to eliminate a plant or animal community; or*
- *substantially reduce the number or restrict the range of an endangered, rare or threatened species [listed species]*

The concept of a "plant or animal community" as used in CEQA threshold "threaten to eliminate a plant or animal community" may be analogous to the reference to "sensitive natural plant communities" in San Luis Obispo County's 2010 General Plan Policy BR 2.6 (see Section 1.7).

Section 15370 "Mitigation" includes:

- *Avoiding the impact altogether by not taking a certain action or parts of an action.*
- *Minimizing impacts by limiting the degree or magnitude of the action and its implementation.*
- *Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.*
- *Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.*
- *Compensating for the impact by replacing or providing substitute resources or environments, including through permanent protection of such resources in the form of conservation easements.*

The lead agency has the final determination over whether a project is or is not permissible, based upon the environmental review, completed requirements and environmental documentation, and their judgement that the project will not have a significant effect on the environment, or that all significant effects have been mitigated.

California Public Resources Code Section 21083.4 (2005) Oak Woodlands Conservation

This code was derived from the Oak Woodlands Conservation Act (SB 1334 2004). A county shall determine whether a project within its jurisdiction may result in conversion of oak woodlands (i.e., *Quercus* sp. with a minimum of 5 inches diameter at breast height) that will have a significant effect on the environment. If a county determines that there may be a significant effect to oak woodlands, the county shall require one or more of the following oak woodlands mitigation alternatives to mitigate the significant effect of the conversion of oak woodlands:

1. *Conserve oak woodlands, by conservation easements.*

   (A) Plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees.

   (B) The requirement to maintain trees pursuant to this paragraph terminates seven years after the trees are planted.

   (C) Mitigation pursuant to this paragraph shall not fulfill more than one-half of the mitigation requirement for the project.

   (D) The requirements imposed pursuant to this paragraph also may be used to restore former oak woodlands.
2. *Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of Section 1363 of the Fish and Game Code, for the purpose of purchasing oak woodlands conservation easements, as specified under paragraph (1) of subdivision (d) of that section and the guidelines and criteria of the Wildlife Conservation Board. A project applicant that contributes funds under this paragraph shall not receive a grant from the Oak Woodlands Conservation Fund as part of the mitigation for the project.*
3. *Other mitigation measures developed by the county.*

California Fish and Game Code

The California Fish and Game Code (CFGC) is one of the 29 legal codes that form the general statutory law of California. A myriad of statutes regarding fish and game are specified in the CFGC; the following codes are specifically relevant to the proposed Project:

California Native Plant Protection Act. Sections 1900-1913 of CFGC contain regulations of the Native Plant Protection Act of 1977. The intent of this act is to help conserve and protect rare and endangered plants in the state. The act allowed the CFGC to designate plants as rare or endangered.

Nesting Birds. Sections 3503, 3503.5 and 3513 of CFGC states that it is:

> *unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto,"* and *"unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird"* unless authorized.

Natural Community Conservation Planning (NCCP) Act of 1991

The NCCP Act is designed to conserve natural communities at the ecosystem scale while accommodating compatible land use. CDFW is the primary state agency that implements the NCCP. The NCCP plan provides for the comprehensive management and conservation of multiple wildlife species. It identifies and provides for regional protection of natural wildlife diversity while allowing for compatible and appropriate development and growth.

1.7 San Luis Obispo County

Conservation and Open Space Element (COSE)

The COSE focuses on conservation and protection of the County's unique natural resources while balancing the needs of the natural and build environment. The Biological Resources (BR) chapter of the COSE includes the goals and policies intended to sustain healthy ecosystems, preserve biodiversity, restore degraded habitats, and protect diverse landscapes. The following goals, policies, and implementation strategies are applicable to this Project and summarized below.

Goal BR 1

Native habitat and biodiversity will be protected, restored, and enhanced. To achieve this goal, the County has outlined 17 different policies that focus on protection of sensitive areas and the management of these areas through the County's environmental review process. Implementation strategies focus on minimizing development in areas that contain essential habitat for special-status species, sensitive natural communities, wetlands, coastal and riparian habitats, and for maintaining/protecting movement corridors and wildlife nursery sites.

Policy BR 1.4 No Net Loss. Requires development projects to be approved with conditions and mitigation measures that ensure protection of sensitive resources to achieve "no net loss" of sensitive habitat acreage, values, and function. Avoidance of sensitive habitat is highest priority. If avoidance is not feasible, replacement habitat onsite through restoration and/or creation. If onsite mitigation is not feasible, then offsite mitigation is required and shall reflect "no net loss" of habitat.

Policy BR 1.12 Development Impacts to Corridors. Ensures protection of important wildlife movement corridors as a condition of discretionary permits.

- BR 1.12.1 Identify and Protect Wildlife Corridors. Require discretionary development applications in rural areas, including land divisions, to identify and protect wildlife corridors, and avoid disturbance of identified key wildlife corridors.
- BR 1.12.2 Mitigate Impacts to Wildlife Corridors. If avoidance is not feasible, re-establish and/or restore important wildlife corridors that may have been damaged or disrupted.

Policy BR 1.15 Restrict Disturbance in Sensitive Habitat During Nesting Season. Provides implementation strategies for protection of bird-nesting activities.

- BR 1.15.1 Identify Setbacks from Bird Nesting Areas. Require adequate setbacks from sensitive habitat that is occupied during nesting season.
- BR 1.15.2 Preconstruction Surveys for Bird Nesting Areas. Require preconstruction surveys using established protocols during nesting season to protect nests in active use.

Goal BR 2

Threatened, rare, endangered, and sensitive species will be protected. This goal is implemented through 11 different policies that focus on collaboration with trustee/responsible agencies and provides implementation strategies for impacts to threatened, rare, and endangered species. It also promotes efforts to minimize invasive plant species into the natural environment. Policies 2.1, 2.2, 2.4, 2.6 and 2.7 are described in further detail below.

Policy BR 2.1 Coordinate with Trustee Agencies. The County will consult with trustee and other relevant state and federal agencies during environmental review when special-status species, sensitive natural communities, marine resources, or wetlands may be affected. During review of discretionary development applications, coordinate with relevant trustee agencies and require evidence of compliance with any necessary permits from federal and state agencies prior to issuance of grading or building permits.

Policy BR 2.2 Promote Early Consultation with Other Agencies. Require applicants to consult with all agencies with review and/or permit authority for projects in areas supporting wetlands and special-status species at the earliest opportunity. Inform applicants during pre-application review or other pre- submittal activities about other agencies that may have jurisdiction, and the policies and standards of those agencies that may regulate proposed development activities.

Policy BR 2.4 Species Recovery Programs. Support recovery programs for endangered and threatened species. Require that applications for discretionary land use projects and land divisions located in the habitat for endangered or threatened species be consistent with applicable recovery plans.

Policy BR 2.6 Development Impacts to Listed Species. Ensure that potential adverse impacts to threatened, rare, and endangered species from development are avoided or minimized through project siting and design. Ensure that proposed development avoids significant disturbance of sensitive natural plant communities that contain special-status plant species or provide critical habitat to special-status animal species. When avoidance is not feasible, require no net loss of sensitive natural plant communities and critical habitat areas.

- BR 2.6.1 Use of Biological Resource Surveys. Require applications for discretionary projects and land divisions to provide a biological resource survey performed by a qualified biologist when needed to address special-status animal and plant species and their associated habitats.
- BR 2.6.2 Use of Habitat Preservation Ratio. Where avoidance, restoration, or replacement of habitat of special status species is not feasible, require preservation and/or enhancement of similar habitat at a minimum 2:1 ratio to avoid significant cumulative loss of valuable habitats and to achieve no net loss of habitat value.
- BR 2.6.3 Use of Easements to Protect Habitat. Obtain easements or dedications to protect habitat, especially where it is connected to other large areas of unique or sensitive habitat. Natural open space areas in development projects should be contiguous to natural areas adjacent to the site wherever possible.
- BR 2.6.4 Use of Habitat Banking or TDC Program. As an alternative to onsite mitigation and habitat protection, consider participation in an established habitat banking or Transfer of Development Credit (TDC) program if the project meets the criteria of the program. (Also refer to Policy OS 1.15.)
- BR 2.6.5 Use of Habitat Banking Program. Evaluate the use of a habitat banking program to mitigate the effects of development on unique or sensitive habitat.

Policy BR 2.7 Fire Suppression and Sensitive Plants and Habitats. Balance the need for fire suppression and/or vegetation (fuel) management with the need to protect sensitive biological resources. Where possible, design land divisions and development so that fuel-breaks, vegetation,

or fuel modification areas that are needed to reduce fire hazards do not disrupt special-status plant communities or critical habitat for special status animal species. Fuel-breaks and vegetation or fuel modification areas shall be located on the development side of required setbacks from sensitive features and shall be in addition to the required setbacks.

Policy BR 2.8 Invasive Plant Species. Promote and support efforts to reduce the effects of noxious weeds on natural habitats.

Goal BR 3

Maintain the acreage of native woodlands, forests, and trees at 2008 levels. The 5 policies outlined in this goal are consistent with the implementation of the Oak Woodland Ordinance, No. 3346, Chapter 22.58 of the Land Use Ordinance (LUO) (San Luis Obispo County 2008).

Policy BR 3.2 Protection of Native Trees in New Development. Provides an implementation strategy for impacts to native trees.

- BR 3.2.1 Tree Replacement in New Development. Mitigation measures are required if avoidance of native trees is not feasible for land use permits and land divisions. Example mitigation measures include tree replacement using native stock at specified ratios, replanting plans, reseeding disturbed open areas with native, drought, and fire-resistant species, and a required long-term monitoring plan.

Policy BR 3.3 Oak Woodland Preservation. Maintain and improve oak woodland habitat to provide for slope stabilization, soil protection, species diversity, and wildlife habitat.

- BR 3.3.1 Implement Oak Woodlands Preservation Act. Comply with the Oak Woodlands Preservation Act (PRC Section 21083.4) through the review of proposed discretionary development by maintaining the integrity and diversity of oak woodlands, chaparral communities, and other significant vegetation.

Goal OS 1

Important open space areas will be identified, protected, sustained, and where necessary, restored and reclaimed. The policies outlined under this goal are intended to protect: 1) recreation areas, 2) ecosystems and environmentally sensitive resources such as natural area preserves, streams and riparian vegetation, unique, sensitive habitat, natural communities, significant marine resources, 3) archaeological, cultural, and historical resources, 4) scenic areas, 5) hazard areas, and 6) rural character. The implementation strategy is to incorporate up-to-date scientific information and techniques into programs to identify, protect, and manage open space resources."

Oak Woodland Ordinance

Chapter 22.58 of the LUO establishes the Oak Woodland Ordinance which applies to inland portions of the unincorporated areas of San Luis Obispo County. Under this ordinance a Minor Use Permit is required to remove between 1-3 acres of oak woodland habitat over a ten-year period, and a Conditional Use Permit is required to remove more than 3 acres over a ten-year period. This ordinance does not apply to the removal of individual trees unless they are heritage oaks which are defined (22.58.030) as oak trees with a diameter at breast height of at least 48 inches and that are separated from all stands and woodlands by at least 500 feet. This ordinance does not apply to the

establishment of residential land uses that otherwise require a ministerial (non-discretionary) land use permit. The ordinance notes:

> *Residential development may be subject to discretionary approval as required by other standards of this Code (Title 22, Land Use Ordinance) or through an application for a land division pursuant to Title 21, Real Property Division Ordinance, of the County Code. Discretionary land use permits, and land division applications are subject to the California Environmental Quality Act (CEQA), where potential impacts associated with tree removal may be evaluated and mitigated.*

The ordinance further provides that, where a Conditional Use Permit is required because more than 3 acres of oak woodland would be removed over a ten-year period, an "oak woodland management plan" shall be developed and approved as part of the Conditional Use Permit (CUP). As used in the ordinance, the term

> *'Oak Woodland Management Plan' means a plan prepared that provides for the long-term conservation and maintenance of the oak woodland, including but not limited to programs for the maintenance, regeneration and enhancement of the woodland, and the associated woodland habitat and monitoring programs to ensure the objectives of the plan are continuing to be met.*

In the absence of a Conditional Use Permit and Oak Woodland Management Plan the ordinance states that clear-cutting of an Oak Woodland shall not exceed 5 percent of a Site's total Oak Woodland Canopy. A CUP allows for clear-cutting with mitigation and an Oak Woodland Management Plan. From County Code 22.62.060 Conditional Use Permits:

> *Action on a Conditional Use Permit is discretionary and may include: approval based on the standards of this Title; approval with conditions; or disapproval, based on conflict with the provisions of this code, or information in the staff report or public hearing testimony.*

San Luis Obispo County Code 22.96.072 (H8)

Land Use Category Standards for the South County Sub-area, Residential Rural (RR), Dana Ranch [aka Dana Reserve]. The operative language provides as follows:

> *8. Cañada Ranch property - Specific Plan requirement. A Specific Plan shall be prepared for the Cañada Ranch property shown in Figure 98-40 under the guidance of the County upon the application and funding by the property owner(s) prior to the approval of land division applications, although a clustered land division proposed in compliance with the Residential Rural category, Section 22.22.140, and other applicable provisions of this Title, may be approved without Specific Plan preparation. The Specific Plan shall be prepared in compliance with Government Code Section 65450 to plan for the following:*
>
> *a. Types of uses. The concept of a Specific Plan is for uses in the following priority for acreage, scale and intensity: This ordinance requires a Specific Plan that would include:*
>
> *(1) Open space uses within the oak woodlands;*
>
> *(2) Industrial park(s) that will generate "basic" employment for the Nipomo and south county area;*
>
> *(3) Commercial service parks that do not conflict with downtown and community shopping commercial uses within Nipomo;*

(4) Retail uses to serve the daily shopping needs of employees and residents of the site in compliance with purpose and character statements for neighborhood shopping areas in Framework for Planning - Inland Area;

(5) Commercial retail uses that are in compliance with purpose and character statements in Framework for Planning - Inland Area for highway-oriented retail;

(6) Residential areas to contain a mix of housing unit types, a portion of which should be affordable to average employee incomes on the site, timing to be concurrent with or following establishment and operation of nonresidential uses, the timing to be determined by a market feasibility study.

b. Oak habitat preservation. Designation of the existing oak forest habitat for open space preservation, where limited recreational and open space uses may be allowed.

c. Pedestrian-oriented site planning. Location of workplaces, shopping, services, civic buildings and residences in close proximity to each other to facilitate walking and alternative transportation to the private vehicle.

d. Architecture and landscaping. Guidelines for architecture and landscaping that respond to the rural character of the area.

e. Resource, facility and services needs. Extent of necessary public, or private where applicable, needs including, but not limited to, safety, health, waste management and water supply."

San Luis Obispo County Code 22.98.070(D)

San Luis Obispo County Code 22.98.070(D) provides for open space preservation – cluster division incentive. Analysis of proposed land use shall identify the area necessary to maintain open space to preserve features of the applicable resource.

This standard applies to land where important physical, biological or historic resources are identified both on-site and on adjacent properties, to encourage cluster land divisions that will leave the resources in open space areas. Clustered land divisions may utilize an open space parcel area that is smaller than otherwise required by Chapter 22.22 where an important biological habitat, such as an oak woodland or the Nipomo Creek corridor, or land near an historic site such as the Dana Adobe, is identified through the application's review process. The size of the open space area may be determined by a visual, biological, or other applicable analysis of the area in question. The analysis shall identify the area that is necessary to maintain open space to preserve the features of the applicable resource.

The associated guideline states "retain land in open space in new land divisions that will preserve oak woodlands, riparian and other important biological habitats, and historic place surroundings."

Nipomo Community Park Master Plan Final Program EIR BR/mm-10(c)-Oak Tree Protection Guidelines (2017)

Nipomo Community Park Master Plan Final Program EIR BR/mm-10(c)-Oak Tree Protection Guidelines (San Luis Obispo County 2017a) describes typical County guidelines to protect oak trees retained within 50 feet of impact areas:

1. *A qualified arborist shall determine the critical root zone for each retained tree on a case-by-case basis, based upon tree species, age, and size. This area is generally*

defined as 1.0 to 1.5 times the distance from the tree base of the average measurement taken from the tree base to the edge of the canopy/dripline. At a minimum, the critical root zone shall be the distance from the trunk to the drip line of the tree.

2. *All trees to remain within 50 feet of construction or grading activities shall be marked for protection (e.g., with flagging) and their root zone fenced prior to any grading. Grading, utility trenching, compaction of soil, or placement of fill shall be avoided within these fenced areas. If grading in the root zone cannot be avoided, retaining walls shall be constructed to minimize cut and fill impacts. Care shall be taken to avoid surface roots within the top 18 inches of soil. If any roots must be removed or exposed, they shall be cleanly cut and not left exposed above the ground surface. The project arborist shall approve any work within the root protection zone.*
3. *Unless previously approved by the County, the following activities are not allowed within the root zone of existing or newly planted oak trees: year-round irrigation (no summer watering, unless "establishing" new tree or native compatible plants for up to seven years); grading (includes cutting and filling of material); compaction (e.g., regular use of vehicles); placement of impermeable surfaces (e.g., pavement); disturbance of soil that impacts roots (e.g., tilling).*
4. *The County shall minimize trimming of oak trees to remain onsite. Removal of larger lower branches should be minimized to: 1) avoid making tree top heavy and more susceptible to "blow-overs," 2) reduce having larger limb cuts that take longer to heal and are much more susceptible to disease and infestation, 3) retain wildlife habitat values associated with the lower branches, 4) retain shade to keep summer temperatures cooler (retains higher soil moisture, greater passive solar potential, provides better conditions for oak seedling volunteers), and 5) retain the natural shape of the tree. The amount of trimming (roots or canopy) done in any one season shall be limited as much as possible to reduce tree stress/shock (10% or less is best, 25% maximum). If trimming is necessary, the applicant shall use a certified arborist when removing limbs. Unless a hazardous or unsafe situation exists, major trimming shall be done only during the summer months.*

1.8 Special Status Species and Sensitive Habitat Regulations

For purposes of this Biological Report, special status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the ESA; those listed or proposed for listing as rare, threatened, or endangered by the CDFW under the CESA; animals designated as "Species of Special Concern," "Fully Protected," or "Watch List" by the CDFW; and plants with a California Rare Plant Rank (CRPR) of 1, 2, 3, or 4. In the following sections, further details are provided to highlight the different guidelines and qualifications that are used to help identify special status species in this report. In Sections 3.6 and 3.7, the various qualifications are listed in the special status species tables for each species with potential to occur in the project area.

1.8.1 Federal and State Endangered Species Listings

The Federal and California Endangered Species Acts are the regulatory documents that govern the listing and protection of species, and their habitats, identified as being endangered or threatened

with extinction. Possible listing status under both Federal and California ESA includes Endangered and Threatened (FE, FT, CE, or CT). Species in the process of being listed are given the status of either Proposed Federally Endangered/Threatened, Candidate for California Endangered/Threatened (PE, PT, CCE, or CCT). The CESA has one additional status: Rare (CR).

The USFWS published Birds of Conservation Concern (BCC) in 2018 that identified additional "species, subspecies and populations of all migratory nongame birds, that without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973." BCC species represent the USFWS' highest conservation priorities, beyond those already designated as threatened or endangered.

1.8.2 Global and State Ranks

Global and State Ranks reflect an assessment of the condition of the species or habitats across its entire range. Basic ranks assign a numerical value from 1 to 5, respectively for species with highest risk to most secure. Other ranking variations include rank ranges, rank qualifiers, and infraspecific taxon ranks. All Heritage Programs, such as the CNDDB use the same ranking methodology, originally developed by The Nature Conservancy, and now maintained and recently revised by NatureServe. Procedurally, state programs such as the CNDDB develop the State ranks. The Global ranks are determined collaboratively among the Heritage Programs for the states/provinces containing the species. Rank definitions, where G represents Global and S represents State, are as follows:

- GNR: Unranked – global rank not yet assessed
- G1/S1: Critically imperiled globally/in state because of extreme rarity (5 or fewer populations).
- G2/S2: Imperiled globally/in state because of rarity (6 to 20 populations).
- G3/S3: Vulnerable; rare and local throughout range or in a special habitat or narrowly endemic (on the order of 21 to 100 populations).
- G4/S4: Apparently secure globally/in state; uncommon but not rare (of no immediate conservation concern).
- G5/S5: Secure; common, widespread, and abundant.
- G#G#/S#S#: Rank range - numerical range indicating uncertainty in the status of a species, (e.g., G2G3 more certain than G3, but less certain that G2).
- G/S#?: Inexact numeric rank
- Q: Questionable taxonomy - Taxonomic distinctiveness of this entity is questionable.
- T#: Infraspecific taxa (subspecies or varieties) – indicating an infraspecific taxon that has a lower numerical ranking (rarer) than the given global rank of species.

1.8.3 California Rare Plant Ranks

Plant species are considered rare when their distribution is confined to localized areas, their habitat is threatened, they are declining in abundance, or they are threatened in a portion of their range. The California Rare Plant Rank (CRPR) categories range from species with a low threat (4) to species that are presumed extinct (1A). All but a few species are endemic to California. All of them are judged to be vulnerable under present circumstances, or to have a high potential for becoming vulnerable. Threat ranks are assigned as decimal values to a CRPR to further define the level of threat to a given species. The rare plant ranks and threat levels are defined below.

Ranks

- 1A: Plants presumed extirpated in California and either rare or extinct elsewhere.
- 1B: Plants rare, threatened, or endangered in California and elsewhere.
- 2A: Plants presumed extirpated in California, but common elsewhere
- 2B: Plants rare, threatened, or endangered in California, but more common elsewhere
- 4: Plants of limited distribution - a watch list

Threat Levels

- 0.1: Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
- 0.2: Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat)
- 0.3: Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

1.8.4 California Department of Fish and Wildlife Animal Rank

The California Department of Fish and Wildlife (CDFW) assigns one of three ranks to Special Animals: Watch List (WL), Species of Special Concern (SSC), or Fully Protected (FP). Unranked species are referred to by the term Special Animal (SA).

Animals listed as Watch List (WL) are taxa that were previously designated as SSC, but no longer merit that status, or taxa that which do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status.

Animals listed as California Species of Special Concern (SSC) may or may not be listed under California or federal Endangered Species Acts. They are considered rare or declining in abundance in California. The Special Concern designation is intended to provide the CDFW biologists, land planners, and managers with lists of species that require special consideration during the planning process to avert continued population declines and potential costly listing under federal and state endangered species laws. For many species of birds, the primary emphasis is on the breeding population in California. For some species that do not breed in California but winter here, emphasis is on wintering range. The SSC designation thus may include a comment regarding the specific protection provided such as nesting or wintering.

Animals listed as Fully Protected (FP) are those species considered by CDFW as rare or faced with possible extinction. Most, but not all, have subsequently been listed under the CESA or ESA.

Fully Protected species may not be taken or possessed at any time and no provision of the California Fish and Game code authorizes the issuance of permits or licenses to take any Fully Protected species.

1.8.5 Sensitive Habitats

Sensitive Natural Community is a state-wide designation given by CDFW to specific vegetation associations of ecological importance. Rarity and ranking of Sensitive Natural Communities involves the knowledge of range and distribution of a given type of vegetation, and the proportion of occurrences that are of good ecological integrity (CDFW 2021, CNDDB 2021b). Evaluation is conducted at both the Global (G) and State (S) levels, resulting in a rank ranging from 1 for very rare and threatened to 5 for demonstrably secure. Natural Communities with ranks of S1-S3 are considered Sensitive Natural Communities in California and may need to be addressed in the environmental review processes of CEQA and its equivalents.

1.8.6 California Native Plant Society Policy

In 1987 CNPS adopted a policy regarding mitigation of impacts to rare and endangered plants in 1987. The policy does not recognize off-site compensation as mitigation.

> *The policy of the California Native Plant Society is that all potential direct, indirect, and cumulative impacts to rare, threatened, or endangered plants and their habitats must be assessed and that appropriate measures be implemented to prevent such impacts resulting from projects. The policy of the Society is also that environmental documents and mitigation plans be based on complete, accurate and current scientific information. Viability of rare, threatened, or endangered plants and their habitats takes precedence over economic or political expediency. Because of the tremendous diversity of rare plant habitats in California, and the dependence of rare plants on their local habitats, it is imperative that mitigation measures be developed on a site specific basis. Local environmental conditions, species biology, land use patterns and other factors must be incorporated into the design of mitigation plans.*
>
> *The goals of this policy are to prevent the decline of rare plants and their habitats and to ensure that effective rare plant preservation measures are implemented.*
>
> *Of the mitigation measures listed in the California Environmental Quality Act, the Society fully endorses only that of avoiding the impact. Measures to minimize, to rectify, or to reduce or eliminate the impact over time are recognized by the Society as partial mitigation. The Society does not recognize off-site compensation as mitigation.*

CNPS (1998) provides guidance on mitigation options as they relate to CEQA Section 15370:

> *Of the five mitigation types in the California Environmental Quality Act, the California Native Plant Society fully supports those which avoid net reduction of population size or species viability. For most plant species this requires the protection of habitat essential to the survival of the species. In some instances, this also requires that impacts be fully avoided in order to prevent a significant impact (i.e., a net loss of plant numbers, habitat, or genetic variability essential to the future existence and recovery of the species). Alternatives such as site restoration and off-site introduction are generally unproven, and usually unsuccessful.*

Avoidance of impacts is the preferred mitigation and may be achieved by:

> *(1) pre-project planning and design; (2) reconfiguring an existing project design; or (3) adopting the no-project alternative. Project planning and design measures to avoid impacts may include arrangement of facilities on-site to avoid sensitive features. Additional measures are almost always required to protect avoided sites from impacts associated with construction and operation of the project. Such protection can include, but is not limited to, fencing, open space or conservation easements, and transfer of development rights.*

The Society believes that the other mitigation alternatives in CEQA do not fully mitigate for significant impacts to rare plants and their habitats for three reasons:

> *(1) These alternatives compromise and ultimately negate mitigation by allowing net losses of rare plant populations and habitat. Mitigation must, according to CEQA, fully offset or reduce significant impacts to a less than significant level.*
>
> *(2) Most rare plants are restricted to their known locations because they have specialized, poorly understood, habitat requirements. Creating the exact environmental conditions that these plants require may not be possible.*
>
> *(3) The Society does not endorse alteration of naturally occurring plant communities through transplantation because the methodology for most rare plants is untested and therefore unreliable and because most past attempts have ultimately failed.*

The Society recognizes that where losses are allowed or unavoidable:

> *off-site restoration, compensation, transplantation or other salvage methods should be attempted to enhance degraded populations or provide for partial survival of the sacrificed population. Such measures also provide additional knowledge of the species' horticultural and ecological requirements. Such measures should never be performed so that an otherwise unaffected population is in any way jeopardized, for example by genetic contamination.*

The Society recommends that mitigation alternatives other than avoidance can be used in combination to reduce impacts to less than significant levels. The alternatives should be used in conjunction with monitoring and long-term management agreements. Alternatives include:

> *Reducing Impacts:*
>
> *The significance of impacts may be minimized by reducing the size of the project (i.e., partial avoidance) and by locating the project in the least environmentally sensitive area. Areas where impacts are avoided should be surrounded by buffer zones where impacts are absorbed and set aside and permanently protected in conservation or open space easements. Efforts should be made to salvage portions of the population that will be lost.*
>
> *Restoration:*
>
> *Restoration can be used to mitigate impacts from projects approved prior to environmental regulations, or impacts allowed through a 'statement of overriding considerations.'*
>
> *Depending upon the degree of impact, habitat restoration may be as simple as removing debris and controlling public access. In more complex situations, however, partial or total restoration of degraded habitat may require extensive revegetation, and soil protection and stabilization programs. Restoration must be tailored to the specific project site based on the habitat and species involved. General guidelines for restoration projects involving rare plants are discussed in Appendix D* [of CNPS Mitigation Guidelines (1998).]

Reduction Over Time:

Impacts may be significantly reduced or eliminated by controlling public access and by fencing or staking the habitat area to prevent accidental intrusion into the site. Monitoring rare plants and habitats during all phases of a project will help ensure that construction and operation activities do not encroach on protected habitat.

When project actions have ended, restraints may or may not be removed depending on the completed project's potential for long-term impacts on the sensitive area. In most instances, control of public access to sensitive habitat sites needs to be continued beyond the construction phase of an individual project, especially in moderate and high-density development areas. Public education about the value of the protected resources should also be considered for these areas.

Attempts to reduce or eliminate impacts over the life of the project should be required for all projects if the potential exists for secondary impacts due to human access; mitigation agreements that require placement of a conservation or open space easement on the mitigation site should be considered to implement this measure.

Off-site Compensation:

Compensating for the impact by protecting substitute resources or environments has been used in some instances to mitigate unavoidable impacts. In most instances off-site compensation does not fully reduce impacts to an insignificant level because of a net loss of individuals or habitat that supports a natural self-sustaining rare plant population. In spite of this, off-site compensation is a useful tool under specific circumstances where other mitigation alternatives cannot be applied or do not fully mitigate significant impacts.

Off-site compensation has been approached in several different ways, including: 1) permanent protection of an existing off-site native population; 2) permanent protection of an off-site introduced population; 3) a combination of 1) and 2); or 4) mitigation banking.

Determining habitat value for off-site compensation is difficult. The size of the acquisition will vary depending upon the type, condition, extent and rarity of the habitat and species. In any case, the acquisition and permanent protection of an alternative parcel does not alter the fact that the loss of the initial site brings the rare habitat and species one step closer to ultimate extinction. Species preservation is greatly enhanced when plants are protected at a number of separate sites. Although the permanent protection of a vigorous, self-sustaining population of the species tends to reduce the endangerment potential of the species at that particular site, it does not necessarily fully compensate for the loss of the habitat known to support a viable population. To further reduce the endangerment potential for the species and habitat, the ratio of acquisition to loss must in most cases exceed 1:1 for any species. The ratio should be higher for rarer species, particularly for those that occupy irreplaceable habitats. In addition, enhancing off-site compensation areas (e.g., reducing grazing or OHV impacts) can help to more fully compensate for the net loss of plants at a project site.

If transfer of the threatened population is being attempted, an ecological study of the site, including an inventory of rare species, is needed to identify the feasibility of introduction. Genetic contamination can occur by mixing of populations of the rare plants and needs to be avoided, as does hybridization between the rare plant and close relatives that could occur at the introduction site. In no case are unthreatened populations to be jeopardized by the transfer

of genetic material from the threatened site. If the compensation site is considered suitable, acquisition or other permanent protection efforts are required to ensure adequate long-term protection, and therefore to mitigate for a net loss of rare plants or habitat. A propagation program should be developed for the salvage and transfer of rare plant populations from the initial parcel before initiating any activities. Permits may be required from California Department of Fish and Game (DFG) or the U.S. Fish and Wildlife Service. Propagation methods for the salvaged population must be developed on a case-specific basis. The propagation program schedule must provide adequate lead time to plan and carry out transfer at the correct time of the year. In order to serve as mitigation, the transfer must be successfully completed before the project's construction activities eliminate plants or habitats. Maintenance and monitoring programs which include the collection of data to document degree of success should also be developed for the compensation site to ensure the transplanted population is self-sufficient and thereby demonstrate success.

1.8.7 Sensitivity Criteria for Special Status Plants

The following information was used to evaluate impact significance for special status plants based on those listed or proposed for listing as rare, threatened, or endangered by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act (CESA), and plants with a California Rare Plant Rank (CRPR) of 1 (considered threatened or endangered throughout its range), or 4 (limited distribution).

California Rare Plant Rank 4 plants are typically not considered special status species under San Luis Obispo County guidance. However, special circumstances may be considered to CRPR 4 local populations. For this Project we used the Final EIR for Jack Ranch (San Luis Obispo County 2018) as an example for determining significance to CRPR 4 special status plant species, where direct impacts cannot be avoided through redesign. Project impacts affecting more than 10 percent of the population within the Study Area would be mitigated offsite at a minimum ratio of 1:1. The mitigation ratio applies to plant count and occupied habitat (at least 1 plant preserved/protected for every 1 plant impacted and 1 acre preserved/protected for each occupied acre impacted) up to the significance threshold.

2 METHODS

2.1 Biological Resource Literature Review

Preliminary research includes review of relevant reference documents and agency data to determine what biological resources may occur near or in the Study Area. Literature review included:

- USFWS 5-year review on Pismo Clarkia (USFWS 2009);
- Queries of special-status species occurrence records and databases in November 2020;
- Review of literature on sensitive species and biological resources in the project area and region, including review of previous biological reports for the area, [including the 2018 Biological Constraints Analysis for Cañada Ranch (Althouse and Meade 2018)].

Althouse and Meade conducted a data search from the CNDDB and the California Native Plant Society (CNPS) On-line Inventory of Rare and Endangered Plants of California on June 3, 2020 (CNDDB 2021b, CNPS 2021b). Other database searches included online museum and herbarium specimen records for locality data within San Luis Obispo, as maintained by the Consortium of California Herbaria (CCH 2021). The data search area included the Oceano and Nipomo USGS 7.5-minute quadrangles and the 6 surrounding quadrangles (Arroyo Grande Northeast, Guadalupe, Pismo Beach, Point Sal, Santa Maria, and Tar Spring Ridge). Data was compiled for sensitive plant and wildlife species and reviewed according to each species potential to occur at the Study Area. The compiled list of CNDDB, CNPS, and CCH records are provided in Appendix C and Appendix D. We queried a list of federally proposed, candidate, threatened, and endangered species that may occur in the project region obtained from the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system (USFWS 2014) provided in Appendix E and the USFWS National Wetlands Inventory (USFWS 2020, Appendix B).

Special status species lists produced by database and literature searches were cross-referenced and analyzed according to the described habitat types in the Study Area to identify all potential special status species that could occur in or near the Study Area. Each special status species that could occur in or near the Study Area is individually discussed in Sections 3.6.2 and 3.7.2. After review of the literature and completion of site visits the following criteria were used to determine the potential for special-status species to occur within the Study Area:

- **Present:** The species was observed in the Study Area during field surveys.
- **High Potential:** Highly suitable habitat and CNDDB or CNPS occurrence records indicate the species is likely to occur in the Study Area or the immediate vicinity. High potential is related to presence of appropriate soil, aspect, slope, microsite conditions, and proximity to occupied habitats. Individuals may not have been observed during field surveys; however, the species likely occurs in or near the Study Area.
- **Moderate Potential:** Suitable habitat is present in the Study Area and CNDDB occurrences or surveys have recorded the species in the vicinity of the Study Area. Individuals were not observed during field surveys, but the species could be present, at least seasonally or as a transient.
- **Low Potential:** Marginally suitable habitat is present in the Study Area, and there are no occurrence records or other historical (i.e., 50 years or older) records in the vicinity of the

Study Area. Individuals were not observed during surveys and are not expected to be present.

- **No Potential:** Suitable habitat for the species is not present in the Property, the species is a perennial shrub or tree that was not observed during site surveys, and/or the species is not known to occur in the region.

2.2 Soils

A soil report was created by importing the Study Area as an Area of Interest (AOI) into the Natural Resources Conservation Service (NRCS) Soil Survey Geographic Database (SSURGRO) via their online portal. The resulting soil report was reviewed, and a map was created using the U.S. Department of Agriculture (USDA) NRCS Soil Survey GIS data (USDA 2018a). Soils data are summarized in Section 3.2.

2.3 Surveys

The Study Area was surveyed for biological resources from the winter of 2017 to summer 2021 (Table 2). Surveys were conducted by biologists LynneDee Althouse, Dan Meade, Jason Dart, Shannon Henke, Darcee Guttilla, Greg Salas, Bret Robinson, Will Knowlton, Sarah Termondt, Adam Searcy, and Kyle Nessen. Meandering transect surveys were conducted on foot to inventory existing species, special status plants and animals, and habitat types, and to collect photographic documentation of the Study Area. Each habitat type was field inspected and described by species composition in Section 3.3. All plant and animal species observed in the Study Area were identified and documented in Sections 3.6.3 and 3.7.3.

TABLE 2. BIOLOGICAL SURVEYS

Survey Date	Biologist(s)	Weather Observations	Activities
12/6/2017	LynneDee Althouse	56 °F, 0-5 mph, clear	Initial site visit
12/19/2017	Shannon Henke, Darcee Guttilla	59 to 66 °F, wind 0 to 8 mph, 5% cloud cover	Botanical survey and wildlife survey
12/29/2017	Shannon Henke, Darcee Guttilla	56 to 82 °F, wind 0 to 10 mph, 30% cloud cover	Botanical survey and wildlife survey
4/13/2018	Shannon Henke, Darcee Guttilla	55 to 72 °F, wind 12 mph, clear	Botanical survey and wildlife survey
5/18/2018	Shannon Henke	55 to 68 °F, wind 12 to 24 mph, 50% cloud cover	Botanical survey
6/1/2018	Shannon Henke	64 to 74 °F, wind 13 mph, clear	Botanical survey
6/12/2018	LynneDee Althouse, Shannon Henke	70 to 80 °F, wind 0-2 mph, clear	Botanical survey
7/3/2018	Shannon Henke	61 °F, wind 5 mph, 10% cloud cover	Botanical survey
6/14/2019	Kyle Nessen, Mallory Patino, Darcee Guttilla, Shannon Henke, LynneDee Althouse	55 °F, wind 0-2 mph, 100% cloud cover	Botanical survey, oak tree inventory, bird point count

Survey Date	Biologist(s)	Weather Observations	Activities
8/29/2019	Kyle Nessen, Charleen Rhodes	60-77 °F, wind 0-25 mph, 30% cloud cover	Oak tree inventory and botanical survey
9/18/2019	Kyle Nessen	52-78 °F, wind 8-14 mph, 25% cloud cover	Oak tree inventory and botanical Survey
9/19/2019	Kyle Nessen	57-75 °F, wind 6-24 mph, 100% cloud cover	Oak Tree Inventory and Botanical Survey
4/15/2020	Jason Dart, Greg Salas, Bret Robinson	60-72 °F, wind 1-5 mph, 0% cloud cover	Legless lizard, badger, and nesting bird surveys
4/17/2020	Will Knowlton	60-70 °F, wind 1-5 mph, 100% cloud cover	Nesting bird survey
4/21/2020	LynneDee Althouse, Sarah Termondt	65-80 °F, wind 0-5 mph, 25% cloud cover	Botanical Survey and habitat mapping of 7-acre parcel
4/24/20	Dan Meade	52-83 °F, wind 8-14 mph, 25% cloud cover	Invertebrate survey
5/6/2020	Will Knowlton	65-85 °F, wind 1-10 mph, 10% cloud cover	Legless lizard, badger, and nesting bird surveys
5/19/2020	LynneDee Althouse, Sarah Termondt, Kyle Nessen, Colby Boggs (Rincon Consultants)	65-85 °F, wind 0-5 mph, 10% cloud cover	Botanical survey, Pismo clarkia population counts
5/21/2020	Dan Meade	71 °F, wind 0-21 mph, clear	Pismo clarkia pollinator survey
5/26/2020	Justin Purnell	60-80 °F, wind 5-8 mph, 35% cloud cover	Bat habitat assessment, acoustic monitoring set up, evening emergence survey
5/27/2020	Sarah Termondt. Kyle Nessen, Kyle Weichert (Rincon Consultants)	70-85 °F, wind 0-5 mph, 10% cloud cover	Botanical Survey, Pismo Clarkia SCP Data Collection
6/3/2020	LynneDee Althouse, Sarah Termondt, Aaron Harville (MBS Land Surveys), Colby Boggs (Rincon Consultants)	82-90 °F, wind 0-5 mph, 10% cloud cover	Pismo Clarkia mapping with Surveyor
6/9/2020	Sarah Termondt	70-90 °F, wind 0-5 mph, 10% cloud cover	Botanical survey
6/24/2020	LynneDee Althouse	75 °F, wind 0-5 mph, clear	Pismo Clarkia follow-up
7/21/2020	Bret Robinson	70-80 °F, wind 0-5 mph, clear	Reptile cover board inspection and raptor survey
3/9/2021	Kyle Nessen, Adam Searcy	51-58 °F, wind 3-11 mph, 35% cloud cover	Site assessment and survey for plant and animal species
4/09/2021	LynneDee Althouse	65 °F, gusty wind 10-15 mph, hazy	Pismo Clarkia and CA Spineflower spot-check
4/26/2021	LynneDee Althouse	60 °F, breezy 10-15 mph, slightly cloudy	Pismo Clarkia and CA Spineflower spot-check
5/25/2021	Kyle Nessen, Adam Searcy	63-75 °F, wind 4-14 mph, 40% cloud cover	Count oak trees and map Pismo clarkia populations

Survey Date	Biologist(s)	Weather Observations	Activities
5/27/2021	Adam Searcy, Heather Schneider (SBBG)	50-65 °F, wind 2-10 mph, 35% cloud cover	Tag Pismo Clarkia for seed collection
6/7/2021	Adam Searcy	52-62 °F, wind 1-10 mph, 60% cloud cover	Pismo Clarkia census and botanical survey
6/8/2021	Adam Searcy	55-65 °F, wind 2-14 mph, 20% cloud cover	Pismo Clarkia census and botanical survey
6/16/2021	Adam Searcy	72-92 °F, wind 2-8 mph, 35% cloud cover	Oak tree inventory
6/17/2021	Adam Searcy	65-78 °F, wind 1-8 mph, 25% cloud cover	Oak tree inventory
6/18/2021	Adam Searcy	61-73 °F, wind 2-8 mph, 15% cloud cover	Oak tree inventory
6/21/2021	Adam Searcy	55-66 °F, wind 2-9 mph, 45% cloud cover	Oak tree inventory
6/22/2021	Adam Searcy	58-69 °F, wind 1-10 mph, 35% cloud cover	Oak tree surveys
7/2/2021	Adam Searcy	56-67 °F, wind 1-9 mph, 40% cloud cover	Oak tree surveys
7/12/2021	Adam Searcy	57-70 °F, wind 2-8 mph, 30% cloud cover	Collected Pismo clarkia seed

2.3.1 Botanical Resources

Habitats

Each habitat type occurring in the Study Area was inspected, described, and identified using the hierarchical classification of *A Manual of California Vegetation* (CNPS 2021a, Section 3.3). The minimum mapping unit area was 1-acre. Natural habitat types were identified to the alliance or association level, when applicable, or to group level when they did not conform to a described alliance. Holland and Keil (1995) habitat descriptions were also reviewed. Habitats comprised primarily of introduced, naturalized vegetation are classified as semi-natural stands. Transects were utilized to map approximate boundaries of different vegetation types and hand notation of habitats on high-resolution aerials were digitized into polygon layers. Supplemental rapid assessment vegetation relevé sampling within each recognized habitat type was also recorded.

Trees and Woodlands

In 2018 we mapped and measured individual trees within a discrete 17-acre area (formerly called "Area 4") of the Dana Reserve to determine precisely how many trees per acre occurred in that part of the oak woodlands. We measured all trees over 4 inches in diameter at breast height (DBH, 4.5 feet above ground level). Where trees sprouted from a central base area, trunks were counted as one tree canopy when stems emerged from within one foot of their closest neighbor. The DBH measurements were combined for multi-stemmed trees. Canopy and height were measured for the multi-stemmed unit.

In 2021 we mapped the remaining individual oak trees on Dana Reserve and adjacent APN 091-301-030 and APN 091-301-29. We used ArcGIS QuickCapture for data entry and an Eos Arrow

100 GNSS unit for sub-meter accuracy. Six DBH categories were derived data from the 2018 Area 4 survey based on a Jenks natural breaks cluster analysis (Jenks, 1967). The 2021 mapping effort classified trees within these six size categories: 5-13", 14-22", 23-34", 34-47", 48"+, 48"+ (single stem). DBH class was estimated for each tree except for the largest specimens (larger than ca. 34" DBH) which were measured with a DBH tape.

Many oak trees within the Study Area are multi-stemmed groups and some are clearly growing from one root mass as they are connected by above-ground wood. Others may be connected below-ground, but most connections are not visible, and connectivity (or lack thereof) is not determinable without significant excavation. Multi-trunked trees were mapped based on the following criteria:

- If trunks were separated from each other by more than 18 inches of soil they were mapped as separate individuals
- If separate trunks were connected by above-ground wood at any distance they were mapped as one multi-stemmed individual
- If separate trunks were within 18 inches of each other, they were mapped as one individual. This applied to obvious circular clumps as well as irregular clumps that spanned many feet so long as a path existed between separate trunks with no between-trunk space exceeding 18 inches.

For discussion regarding oak tree Critical Root Zones (CRZ), we referred to the Nipomo Mesa Community Park Master Plan Program EIR (2017a) described in Section 1.7 and an MND for a project in Arroyo Grande on a 317-acre site (San Luis Obispo County 2019a). The initial study for the MND states:

> *The County requires mitigation for impacts to, or removal of, native oak trees with a diameter at breast height (DBH) of five inches or greater, as measured at a height of four feet six inches above ground. Impacts include any ground disturbance within the critical root zone of one and one-half times the canopy/drip line diameter, trunk damage, or any pruning of branches three inches in diameter or greater. Mitigation ratios to removed and impacted trees are 4:1 and 2:1, respectively.*

Another initial study for an Arroyo Grande project on a 28-acre parcel (San Luis Obispo County 2019b) stated:

> *…all trees to remain on-site that are within fifty feet of construction or grading activities shall be marked for protection (e.g., with flagging) and their root zone fenced. The outer edge of the tree root zone is 1-1/2 times the distance from the trunk to the drip line of the tree. Grading, utility trenching, compaction of soil, or placement of fill shall be avoided within these fenced areas. If grading in the root zone cannot be avoided, retaining walls shall be constructed to minimize cut and fill impacts. Care shall be taken to avoid surface roots within the top 18 inches of soil. If any roots must be removed or exposed, they shall be cleanly cut and not left exposed above the ground surface.*

Botanical Surveys

Identification of botanical resources included field observations and laboratory microscope inspection of collected material (refer to Table 6). Botanical surveys were conducted between the winter of 2017 to early summer of 2021 (Table 2) according to survey guidelines (USFWS 2000, CDFW 2018, CNPS 1998, San Luis Obispo County 2000). Reconnaissance transects were

meandering with an emphasis on locating habitat appropriate for special status plants. All plant species observed on the Property were identified and recorded by a qualified botanist (Section 3.7.3). Point data was collected for populations containing less than 100 individuals within approximately 100 sq. ft. Polygon data was collected for species that occurred across areas larger than 100 sq. ft. and population count estimates were taken based on density sampling. Botanical surveys were appropriately timed to identify all special status plant species known from the region (refer to Table 4 and Table 5) that have potential to occur in the Study Area. Botanical nomenclature used in this document follows the Jepson eFlora (Jepson Flora Project 2020). Oak tree inventories, rapid assessments, and tree counts were conducted between 6/14/2019 and 7/2/2021.

2.3.2 Wildlife

Wildlife species were identified by direct observation or by visual signs of animal presence such as burrows/dens, nests, vocalization, tracks, and/or scat. All wildlife observations were recorded during Study Area field surveys (refer to Table 9). Nomenclature for birds is in accordance with the American Ornithological Society Checklist (Chesser et al. 2019), and mammals are consistent with the Revised Checklist of North American Mammals North of Mexico (Baker et al. 2003). Small mammal trap surveys were not in the scope of work for this biological report.

Sensitive Invertebrates

Flying insect surveys were conducted by Daniel E. Meade on April 24 and May 21, 2020, with the goal of identifying native bees gathering nectar on the property. Field work was timed to coincide with the height of the wildflower bloom season and the annual spring increase in worker bumblebees. Sweep netting was used to capture flower-visiting insects. This method targets pollinators, specifically bees. Sweeps were conducted rapidly over flowers using an aerial net, which was checked often, and captured insects were transferred to jars or vials. Sweep surveys were conducted across flower fields and flowering shrubs (primarily *Lupinus arboreus*) throughout the property. Large native bees observed on flowers, especially bumblebees, were targeted for capture. Abundant European honeybees (*Apis mellifera*) were not targeted. Sampling began at 12:00 PM near the entrance to the property on Hetrick Avenue and moved through wildflower fields from the southwest to the northeast, ending at 3:43 PM.

Northern California legless lizard

Northern California legless lizard surveys were conducted over multiple days in April and May 2020. Suitable habitat within the Study Area was surveyed by hand and with potato rakes. Leaf litter and topsoil were carefully raked to inspect for legless lizards or signs of their presence. Additionally, on April 15, 2020, 15 flattened cardboard coverboards (24 x 28-inch) were installed throughout the Study Area. Litter was raked clear and edges of the coverboard buried after placement and then secured with a brick. Coverboard locations were mapped and they will be periodically monitored throughout the year.

Sensitive and Nesting Birds

Birds were identified by direct observations using 10-power binoculars and/or by vocalizations. Nesting bird surveys were conducted by avian biologist Will Knowlton on April 17 and May 6, 2020. Nests and tree cavities were searched for while identifying all birds encountered. Nest

searches were conducted by visually inspecting trees and scanning under tree canopy with binoculars and by observing the behavior of birds. All large and medium-sized stick nest locations were recorded with a GPS unit. Trees were also visually inspected for the presence of nest cavities and cavity-bearing tree locations were recorded with a GPS unit.

Presence of burrowing owls (*Athene cunicularia*) was assessed by inspecting suitable California ground squirrel (*Otospermophilus beecheyi*) burrow complexes incidentally while conducting nesting bird surveys. Binoculars were used to scan for burrowing owls and suitable burrows were inspected for signs of burrowing owl occupation (e.g., pellets, whitewash).

Sensitive Bats

Dana Reserve contains thousands of coast live oak trees, which could serve as daytime roosting sites, and adjacent open areas that provide potential foraging habitat for numerous bat species. Any trees with sufficient foliage, crevices, or loose bark could provide cover for bats.

Methods for the focused bat survey included a visual inspection of trees, evening visual bat emergence survey, and three consecutive nights of acoustic monitoring. The bat survey was performed by biologist Justin Purnell on May 26, 2020. Bat detectors were placed in Lots shown as DR-REC and DR-MF on the Land Use & Public Roads map included in Appendix A. Two Petterson D500X bat detectors with external microphones were placed at the entrance of narrow tree corridors directed toward open habitat, to maximize bat detections while bats foraged in the open habitat. Bat detectors were in place May 26 to 29, 2020. Sound files gathered during acoustic surveys were analyzed with Sonobat software to determine species. The emergence survey was conducted by visual monitoring of trees on the property at dusk with intent to determine if bats emerged from daytime roosting areas on the property. The biologist conducted the evening visual emergence survey from 6:30 PM until 9:30 PM.

American Badger

A survey of the Study Area was conducted on April 15 and May 6, 2020, for American badger. During the survey effort, all potential burrows were examined for size and any sign of use by badgers. Two motion sensing wildlife cameras were placed on game trails in the Study Area on April 15, 2020. These cameras were removed on May 6, 2020, and all photographs were reviewed. A GPS point was taken using AmigoCollect for each camera location and all observed species were documented.

2.4 Maps

Mapping efforts utilized Samsung Galaxy Tab 4 tablets equipped with an EOS Arrow 100 GNSS receiver with sub-meter accuracy. Maps were created by importing GPS data into ArcGIS Pro, a Geographic Information System (GIS) software program. Biological resource data were collected in the field by staff biologists then imported into Esri ArcGIS software program.

Data were overlaid onto airborne digital photographs of the Study Area acquired on May 19, 2020 by 14 CFR Part 107 certified pilot Kyle Nessen. A georeferenced composite image of the Study Area was generated from the acquired aerial images for baseline review and image analysis (USDA 2018b). All flight operations were conducted within visual line of sight and below a maximum altitude of 400 feet above-ground level. The Study Area occurs within Class G airspace and flight operations were conducted with prior permission from the property owner.

3 RESULTS

3.1 Existing Conditions and Site History

The Study Area and adjacent landscapes are comprised of gently rolling hills that generally slope from the highest point near Hetrick Avenue (southwestern side) toward U.S. Highway 101 (northeastern side). No watercourses are located on the property. Nipomo Creek (offsite) occurs east of U.S. Highway 101, conveying water southeast toward the Santa Maria River. Between U.S. Highway 101 and Pomeroy Road the Study Area is bordered by dense oak woodland on the southern end, and patches of landscape trees, oaks, and a line of eucalyptus trees (*Eucalyptus globulus*) closer to U.S. Highway. The main Dana Reserve parcel is undeveloped and has been used as farm and livestock rangeland for more than a century. The County identifies this parcel as Dana Ranch (San Luis Obispo County Code 22.96.072).

Evidence of episodic disturbance was observed in the field and from aerial imagery dating back to 1939. Field evidence of very old woodland clearcutting suggests a link to an historic drought between 1862 and 1864 when ranchers were compelled to fell trees for livestock consumption (Guinn 1890; and author's personal communication with Jim Sinton, family rancher familiar with the Nipomo Mesa). Google Earth imagery indicates that the grassland west of Highway 101 was last farmed in about 2002, or possibly 2006. Aerial imagery from UC Santa Barbara's geography library and Google Earth imagery are provided in Appendix B.

Farming, mowing, and chaparral (brush) removal appears to have been conducted for decades. The 1939 image shows evidence of brush clearing on rolling topography and farmed fields on flatter terrain. The 1949 image indicates some of the brush cover and associated coast live oaks were starting to grow back. Some brush clearing is evidenced in 1957. The 1969 to 1994 aerials show chaparral cover generally increasing in areas not actively farmed. Between 1994 and 2002, shrub reduction appears to have reduced brush cover while retaining young trees barely visible in the 1994 imagery. Aerial images from 2002 and years thereafter show reduced brush cover. Livestock pens are visible in 2011 to 2013 aerial imagery.

Two additional parcels provide a connection to Cherokee Place on the north side of the ranch to Willow Road. The western 7-acre parcel is undeveloped and shows evidence of significant site disturbance from past dry farming. There are no trees, weedy species dominate, and a few bushes have recruited since 2010 when the last mowing appears to have occurred. The eastern 7-acre parcel (shown as Lots 12, A and E) is densely wooded with a residence and numerous animal pens for horses, chickens, and other animals.

3.2 Soils

The Soil Survey of San Luis Obispo County, California, Coastal Part (USDA 1984) identifies Oceano sand as two soil map units, depending on slope. See Figure 3 for digitized spatial data from the USDA soil survey overlaid on an aerial photo. The soil survey map may not indicate small inclusions or other soil types within the Study Area such as sandy loam and fine sand soils.

Oceano sand, 0 to 9 percent slopes (184) and 9 to 30 percent slopes (185) is a very deep and excessively drained soil from stabilized sand dunes formed through deposits of windblown sand. The slope can be nearly flat to moderate (184) to strongly sloping (185). The soil type formed in deposits of windblown sand. Included in this map unit are areas of Baywood fine sand, Garey

sandy loam, and dune land. Permeability is rapid, and the available water capacity is low causing droughty conditions making the soil poorly suited for rangeland. Water erosion is slight to moderate (Ernstrom 1984).

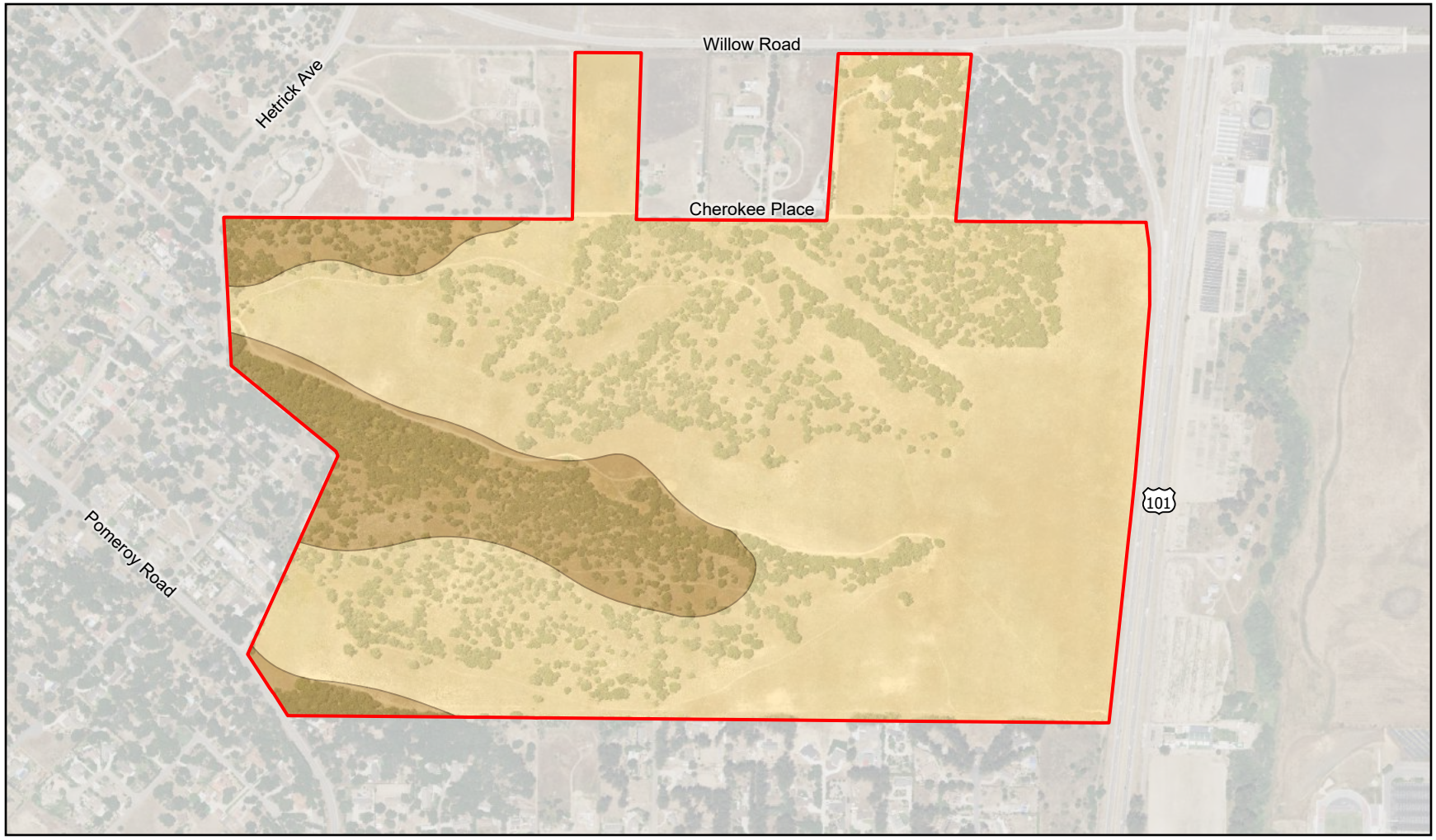
3.3 Habitat Types

Habitat types in the Study Area include coast live oak forest, coast live oak woodland, Burton Mesa chaparral, California perennial grassland group (vegetation with native plants diagnostically present), Mediterranean California naturalized annual grassland (stands strongly dominated by non-native plants), annual brome grasslands alliance, and anthropogenic (Figure 4; Table 3; CNPS 2021a). Habitats were identified to the alliance or association level when possible and to the group level when the onsite habitat did not conform to a known alliance. Sensitive associations were considered when applicable. Global and State ranks are not applied at the group level and, therefore, are not provided for habitat "groups".

TABLE 3. HABITAT TYPES

Habitat Type	Global/State Rank	Location	Area (Acres.)
Coast live oak forest (*Quercus agrifolia* / *Toxicodendron diversilobum*)	GNR	Common on slopes in the Study Area	40.5
Coast live oak woodland (*Quercus agrifolia* / *Adenostoma fasciculatum* – *Salvia mellifera*)	G3/S3	Throughout Study Area, commonly integrading with coast live oak forest and Burton Mesa chaparral	78.3
Burton Mesa chaparral (*Arctostaphylos* (*purissima*, *ru dis*) Shrubland Special Stands)	G1/S1	Occasional on slopes, in areas lacking canopy cover	36
California perennial grassland group	N/A	Common on lower elevation flats in the Study Area	126
Mediterranean California naturalized perennial grassland group	N/A	Northern parcel in Study Area	5.1
Annual brome grasslands alliance	N/A	Northern parcel in Study Area	7.2
Anthropogenic	N/A	Existing roads and structures	2.2
TOTAL			**295.3**

Figure 3. USDA Soil Survey



Legend

- Study Area
- Oceano sand, 0 to 9 percent slopes (83%)
- Oceano sand, 9 to 30 percent slopes (17%)

0 500 1,000 Feet

Dana Reserve
Map Center: 120.50284°W 35.04649°N
Nipomo, San Luis Obispo County

Imagery Source: USDA NAIP, 05/21/2020
Althouse & Meade Inc., 05/19/2020

Figure 4. Habitats

Legend

- Study Area
- Annual Brome Grasslands
- Anthropogenic
- Burton Mesa Chaparral* - S1
- California Perennial Grassland Group
- Coast Live Oak Forest
- Mediterranean California Naturalized Perennial Grassland
- Coast Live Oak Woodland* - S3

*Sensitive Natural Communities with State Rank

0 500 1,000 Feet

Dana Reserve
Map Center: 120.50284°W 35.04649°N
Nipomo, San Luis Obispo County

Imagery Source: USDA NAIP, 05/21/2020
Althouse & Meade Inc., 05/19/2020

ALTHOUSE AND MEADE, INC.
BIOLOGICAL AND ENVIRONMENTAL SERVICES

Map Updated:
October 06, 2021 12:47 PM by SAF

3.3.1 Coast live oak forest (Quercus agrifolia / Toxicodendron diversilobum) (G5 /S4)

Mature, coast live oak (*Quercus agrifolia* var. *agrifolia*) forest occurs on flats and gentle north-trending slopes within the Study Area (Photo 1). This habitat meets the alliance membership rule of coast live oak comprising greater than 50 percent average cover in the tree canopy. There are generally few gaps in the canopy with multiple trees creating a continuous overstory. Trees within coast live oak forest are on average taller than trees in coast live oak woodland and Burton Mesa chaparral and fewer show evidence of historic pruning. Other than a single Peruvian pepper tree (*Schinus molle*) in the northeast near Cherokee Place and individual pine trees (*Pinus* sp.) near both the northeastern and southwestern boundary, the Study Area only contains coast live oaks as the tree canopy in this alliance. The shaded understory is dominated by nonnative annual grasses, poison oak (*Toxicodendron diversilobum*) thickets, and occasional shade-tolerant shrubs such as coffeeberry (*Frangula californica)*, while chaparral species are conspicuously absent. As such, we identify coast live oak forest as the *Quercus agrifolia / Toxicodendron diversilobum* association, which is not a sensitive natural community (CDFW 2021). Rare plant species such as Mesa horkelia (*Horkelia cuneata* var. *puberula)* and Michael's rein orchid (*Piperia michaelii*) are restricted to openings in and around the periphery of coast live oak forest. Of particular note, Pismo clarkia (*Clarkia speciosa* ssp. *immaculata*) is located along the northern edge of coast live oak forest habitat. Coast live oak forest occupies 38.7 acres on Dana Reserve's Project. The proposed project will impact 21.7 acres of coast live oak forest, while the Alternative will impact 15.3 acres (Figure 11 and Figure 12).

The following Species of Special Concern (SSC) are supported by coast live oak forest but are unlikely to be observed without appropriately timed focused surveys: northern California legless lizard (*Anniella pulchra*), pallid bat (*Antrozous pallidus*), silver-haired bat (*Lasionycteris noctivagans*), western red bat (*Lasiurus blossevillii*); and Special Animals (SA) hoary bat (*Lasiurus cinereus*) and Yuma myotis (*Myotis yumanensis*). USFWS Birds of Conservation Concern (BCC) observed in oak woodland include the cavity nesting Oak Titmouse (*Baeolophus inornatus*) and Nuttall's Woodpecker (*Picoides nuttallii;* USFWS 2018). Coast live oak forest supports many songbirds, raptors, and common rodents such as mice, voles, and woodrats. Oak tree canopies, cavities, and loose bark may provide roosting habitat for multiple bat species including little brown bat (*Myotis lucifugus*) and California myotis (*Myotis californicus*).

Photo 1. Coast live oak forest, view west. June 14, 2019.

3.3.2 Coast live oak woodland (Quercus agrifolia / Adenostoma fasciculatum – Salvia mellifera) (G3 /S3)

Coast live oak woodland occurs on gentle slopes and flats within the Study Area (photo 2). Characteristics of this habitat within the Study Area meet the alliance membership rule of coast live oak comprising between 20-50 percent cover and a mixture of open and closed canopy. This habitat integrates with adjacent coast live oak forest, Burton Mesa chaparral, and grassland habitats, creating a heterogeneous mosaic. Many of the understory species present in Burton Mesa chaparral are also present here, including chamise, black sage, and sand mesa manzanita. However, we do not consider these areas Burton Mesa chaparral because oak cover is generally too high to be regarded as a shrub-dominated vegetation community (CNPS 2021a). We identify coast live oak woodland as the *Quercus agrifolia / Adenostoma fasciculatum – (Salvia mellifera)* association, which is a G3/S3 sensitive natural community (CDFW 2021). Evidence of historic clearcutting was observed within the coast live oak woodland in the Study Area along with decades of land management for livestock grazing and fire fuel reduction (see Section 3.1).

Coast live oak woodland habitat supports a unique assemblage of rare plants. All special status plant species observed within the Study Area occur within coast live oak woodland or along its gaps and edges, including sand mesa manzanita (*Arctostaphylos rudis*), sand buck brush (*Ceanothus cuneatus* var. *fascicularis*), Nipomo mesa ceanothus (*Ceanothus impressus* var. *nipomensis*), sand almond (*Prunus fasciculata* var. *punctata*), mesa horkelia (*Horkelia cuneata* var. *puberula*), California spine flower (*Mucronea californica*). Sand mesa manzanita, sand buck brush, Nipomo mesa ceanothus, and sand almond occur in areas where coast live oak woodland integrates with Burton Mesa chaparral. Mesa horkelia is locally abundant and occurs along the margins of oak woodland and tree canopy dripline where this habitat transitions to more open grassland and shrubland vegetation. Pismo clarkia, California spineflower, and Michael's rein orchid were encountered along margins of oak woodland habitat where it transitions to grassland.

Coast live oak woodland occupies 78.3 acres on Dana Reserve's Project. The Project will impact 75.3 acres of coast live oak woodland, while the Alternative will impact 69.9 acres of coast live oak woodland (Figure 11 and Figure 12).

Photo 2. Coast live oak woodland, view north. September 3, 2019

Coast live oak woodland habitat within the Study Area supports Blainville's horned lizard (*Phrynosoma blainvillii*) that was observed onsite, a California Species of Special Concern (SSC). The following SSCs are also supported by coast live oak woodland habitat but are unlikely to be observed without appropriately timed focused surveys: northern California legless lizard (*Anniella pulchra*), pallid bat (*Antrozous pallidus*), silver-haired bat (*Lasionycteris noctivagans*), western red bat (*Lasiurus blossevillii*); and Special Animals (SA) hoary bat (*Lasiurus cinereus*) and Yuma myotis (*Myotis yumanensis*). USFWS Birds of Conservation Concern (BCC) observed in oak woodland include the cavity nesting Oak Titmouse (*Baeolophus inornatus*) and Nuttall's Woodpecker (*Picoides nuttallii;* USFWS 2018). Coast live oak woodland supports many songbirds, raptors, and common rodents such as mice, voles, and woodrats. Oak tree canopies, cavities, and loose bark may provide roosting habitat for multiple bat species including little brown bat (*Myotis lucifugus*) and California myotis (*Myotis californicus*).

*3.3.3 Burton Mesa chaparral (*Arctostaphylos *(*purissima*,* rudis*) Shrubland Special Stands) (G1/ S1, disturbed)*

Dana Reserve has a high potential to support maritime chaparral because of its coastal summer fog influence, sandy nutrient-poor soils, and presence of narrowly endemic plants, especially ceanothus and manzanita species (Davis et al., 1988 and Vasey et al. 2012). The current condition of the chaparral on site is degraded.

Burton Mesa chaparral is a type of maritime chaparral that occurs in southern San Luis Obispo County and northern Santa Barbara County, generally within 12 miles of the ocean. Maritime chaparral is a fire dependent vegetation type that supports exceptional biodiversity particularly in areas subject to periodic fires. The intermediate fire-return interval typically burns with high-intensity crown fires (Conard and Weise 1998) followed by growth periods that last over 15 years (Keeley et al. 2005, Sommers et al. 2011). In the first few years after fire, chaparral persistence depends on shrubs successfully competing with invading grasses (Keeley et al. 2005). Intense rodent herbivory can facilitate the exclusion of exotic grasses from shrublands, indirectly benefitting shrubs and limiting exotic grass invasion (Hendricks 2020). Many maritime chaparral species such as rare manzanitas and ceanothus are obligate seeders (they do not resprout) and require fire to reproduce. Exposure of mineral soil, scarification of seeds, heat, and charate are shown to improve reproduction of obligate seeders following fire (Keeley 1987; Wahlert et al., 2009).

Characteristic species of Burton Mesa chaparral listed in the CNPS Manual of California Vegetation Online (2021a) include *Arctostaphylos purissima* and/or *Arctostaphylos rudis* are dominant or characteristically present in the shrub canopy with *Adenostoma fasciculatum, Arctostaphylos crustacea* ssp. *eastwoodiana, Artemisia californica, Baccharis pilularis, Ceanothus cuneatus* var. *fascicularis, Ceanothus impressus, Diplacus aurantiacus, Ericameria ericoides, Eriophyllum confertiflorum, Helianthemum scoparium, Lotus scoparius* and *Salvia mellifera.* Emergent trees may be present at low cover, including *Quercus agrifolia* or *Quercus parvula* var. *shrevei*. Shrubs are generally less than 5 meters (16 feet tall) canopy open to continuous. Herbaceous layer is variable and may include cryptogamic crust. Soils are derived from Pleistocene sand deposits, occasionally marine siltstones overlain with a thin sand layer.

On Dana Reserve, Burton Mesa chaparral habitat occurs primarily on south trending slopes in areas dominated by re-sprouting shrubs with an open canopy, disturbed by routine brush removal

(Photo 3). Annual Mediterranean grasses dominate the remainder of this habitat that exhibits vegetation type conversion from chaparral to annual grasses and scattered oaks as described by Pratt 2022. Sand mesa manzanita (*Arctostaphylos rudis*), a rare shrub (CRPR 1B.2, Photo 4) endemic to southern San Luis Obispo County and northern Santa Barbara County, is regularly scattered across Dana Reserve's chaparral and open woodland habitats, though never reaching more than 1-2% cover. Burton Mesa chaparral (*Arctostaphylos* (*purissima*, *rudis*) Shrubland Special Stands) is a Sensitive Natural Community listed by CDFW as G1/S1 and is considered a Special Stand by CNPS, which defines this habitat type by the characteristic presence of sand mesa manzanita (CDFW 2021, CNPS 2021a).

Weedy grasses, such as ripgut brome and veldt grass (*Ehrharta calycina*) are the dominant vegetation. However, crown-sprouting Chamise (*Adenostoma fasciculatum*) and black sage (*Salvia mellifera*) co-dominate the shrub layer with variable abundance (Photo 3). Similarly, associated maritime species such as deerweed (*Acmispon glaber*), sticky monkeyflower (*Mimulus aurantiacus*), coffeeberry, hollyleaf cherry (*Prunus ilicifolia*), and broom rush-rose (*Crocanthemum scoparium*) occur in low but persistent cover.

Special status species in this habitat include scattered individuals and groups of sand mesa manzanita, sand almond, sand buckbrush, mesa horkelia, and California spineflower.

Coast live oak trees are commonly found within Burton Mesa chaparral, but canopy does not exceed 20% absolute cover in our mapping effort. Many of the species described within Burton Mesa chaparral are also present in coast live oak woodland, as both habitats often integrade. The primary distinction between these two habitats is the canopy cover of coast live oaks, which, when greater than 20%, is considered a woodland or forest. See coast live oak woodland description for further details.

Photo 3. Re-sprouting shrubs in the disturbed Burton Mesa chaparral habitat which receives routine brush clearing, view north. May 18, 2018

Photo 4. Re-sprouting sand mesa manzanita. June 9, 2020.

3.3.4 California perennial grassland group (disturbed)

Disturbed California perennial grassland group occurs on the sandy flats of the Study Area which appear to have been routinely tilled (i.e., disced) rangeland and support a unique assemblage of plants species (Photo 5 and Photo 6). This habitat type does not conform to a described vegetation alliance in the Manual of California Vegetation (online) and is identified at the group level. The

habitat is strongly dominated by non-native annual plants and generally contains five (5) percent relative cover of native species.

Native perennial plants are consistently diagnostically present, although only two native perennial grasses were observed in small patches: salt grass *(Distichlis spicata)* and coast range melic *(Melica imperfecta)*. All the other grasses are introduced species. The most abundant native plants include California croton (*Croton californicus*) and California spineflower with occasional patches of slender buckwheat (*Eriogonum gracile* var. *gracile*) and emergent shrubs including deerweed, broom rush-rose, mock heather (*Ericameria ericoides*), California sagebrush (*Artemisia californica*) and coastal bush lupine (*Lupinus arboreus*). Ubiquitous introduced annual species, such as ripgut brome and filaree species (*Erodium botrys, E. brachycarpum,* and *E. cicutarium*) are also present. Occasional mature individual coast live oak trees are scattered throughout this habitat type.

This habitat supports special status plant species including abundant California spineflower and occasional mesa horkelia, sand almond, and sand mesa manzanita. This habitat is utilized by a variety of birds, mammals, reptiles, and invertebrates.

Photo 5. California perennial grassland with the special status plant California spineflower (red-colored herb in the foreground), view southwest. May 18, 2018.

Photo 6. California perennial grassland with 4-spot Clarkia in foreground, view east. April 26, 2021.

3.3.5 Mediterranean California naturalized annual and perennial grassland group

The smaller parcels along the western and northwestern portions of the Study Area contain habitat identified as Mediterranean California naturalized perennial grassland group. This habitat is dominated by non-native perennial veldt grass (Photo 7 and Photo 8). Perennial veldt grass is a highly invasive plant species, known to invade sandy soils on the California central coast. This habitat has low plant diversity and is nearly a monoculture of perennial veldt grass. Other occasional plant species include ripgut brome, deer weed, wild oats (*Avena fatua*), telegraph weed (*Heterotheca grandiflora*), Santa Barbara wirelettuce (*Stephanomeria elata*) and California croton. Few mature individual coast live oak trees are scattered throughout this habitat type and oak canopy cover is sparse. This habitat type does not conform to a described vegetation alliance in the Manual of California Vegetation (online) and was consequently identified at the group level.

This habitat supports special status plant species including multiple mature sand buck brush and Nipomo mesa ceanothus as well as a single individual of Mesa horkelia. This habitat is utilized

by a variety of birds, mammals, reptiles, and invertebrates. American badger (SSC) dens were observed in this habitat.

Photo 7. Mediterranean California naturalized perennial grassland habitat view southeast. July 3, 2018.

Photo 8. Mediterranean California naturalized perennial grassland habitat view north. May 27 2020.

3.3.6 Annual brome grassland -Herbaceous Semi-Natural Alliance

The northern portion on the Study Area contains annual brome grassland. This habitat is dominated by a mix of non-native annual grasses (Photo 9 and Photo 10) with abundant ripgut brome, perennial veldt grass, wild oats, and short fruited filaree and occasional California croton and scattered individual mock heather. Ripgut brome constitutes over 60 percent relative cover with other non-natives in the herbaceous layer, with a variety of annuals at low cover, conforming to the membership rules of the *Avena* spp. - *Bromus* spp. herbaceous semi-natural alliance (CNDDB 2021b). No special status plant species were observed in this habitat.

No global or state rank is applied to this vegetation alliance because it is comprised of non-native species and is not a suitable target for conservation activities (CNDDB 2021b). This habitat is utilized by a variety of birds, mammals, reptiles, and invertebrates. A shed skin of a Northern Pacific rattlesnake (*Crotalus oreganus* ssp. *oreganus*) was observed in this habitat.

Photo 9. Annual brome grasslands view northwest. July 3, 2018.

Photo 10. Annual brome grasslands view northwest. June 3, 2020.

3.3.7 Anthropogenic

In general, anthropogenic land uses onsite consist of areas that no longer support native vegetation due to physical alteration. This may include construction of structures, hardscape, pavement and/or landscaping. Anthropogenic land consists of approximately 1.2 acres comprised of Cherokee Place roadway and a private driveway and associate structures used for storage (parcel located northeast of Cherokee Place). Other land uses within this land use category are holding pens for horses and goats, a water tank, garden and landscaped areas, parking areas, and maintained areas for fire/brush clearing purposes. Several isolated oaks occur within this land use classification and were mapped separately from the oak habitats described above.

3.4 Potential Wetlands and Jurisdictional Waters

No evidence of potentially jurisdictional wetlands or waters were observed in the Study Area during 2017, 2018, 2019, and 2020 surveys. The very deep, excessively drained sandy soils of these ancient dunes have rapid permeability with low water capacity. USFWS National Wetland Inventory shows wetlands east of Highway 101 and on property north of Willow Road and east of Hetrick Avenue (Appendix B).

3.5 Sensitive Natural Communities

The Study Site contains two recoginzed sensitive natural communities, Burton Mesa chaparral (Arctostaphylos (purissima, rudis) Shrubland Special Stands, G1/S1) and coast live oak woodland (*Quercus agrifolia / Adenostoma fasciculatum* - (*Salvia mellifera*) association, G3/S3) (CDFW 2021). Both habitats supports a unique assemblage of rare plant species that are associated with maritime climate and sandy soils.

No additional sensitive natural communities were identified in the Study Area (Section 3.3 Habitat Types, Table 3). California perennial grassland and Mediterranean California naturalized perennial grassland groups do not conform to a known alliance and do not have global or state ranks because ranking systems are applied at the alliance level in *A Manual of California Vegetation* (CNPS 2021a).

3.6 Botanical Resources

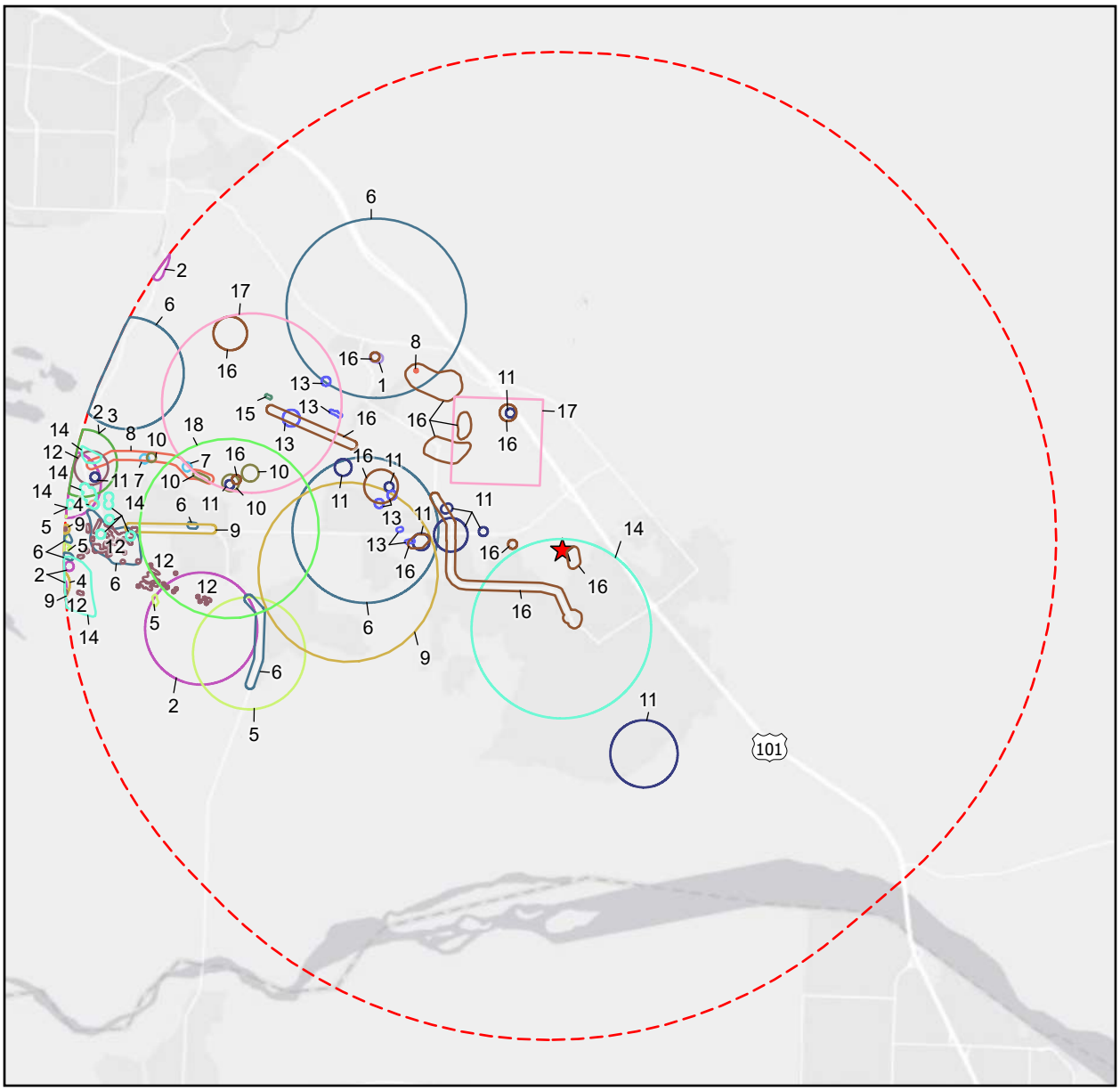
Research on special status plant occurrences conducted within the designated search area (see Methods) determined that 81 special status plant taxa are known to occur in the region (Appendix C). Figure 5 and Figure 9 depict the current GIS data for USFWS Critical Habitat and special status plants mapped near the Study Area by the CNDDB.

Within an 8-quad search radius around the Study Area 18 special status plant taxa could potentially occur. Plant taxa potential to occur is based on habitat requirements. For information regarding special status designations refer to Section 1.9.6 for Special Status Species and Sensitive Natural Communities Definitions. A discussion of the 18 plant taxa with potential to occur is provided in Section 3.6.2.

3.6.1 Potential Special Status Plant Species

Table 4 and Table 5 list 18 special status plants for which appropriate soil and habitat conditions exist, and therefore could potentially occur in the Study Area. Table 4 lists 8 special status plant taxa observed and Table 5 lists 10 special status plant taxa not detected but with potential to occur onsite. The tables include Federal and California State status, Global and State rank, CRPR, typical blooming periods, and habitat preferences for each taxon (CNPS 2021b, CNDDB 2021b, Jepson Flora Project 2020). Each taxon's potential for occurrence onsite is assessed. Taxa are listed alphabetically by scientific name.

Figure 5. California Natural Diversity Database Plant Records



Label	Common Name	Federal/State Status	Rare Plant Rank
1	Black-flowered figwort	None/none	1B.2
2	Blochman's leafy daisy	None/none	1B.2
3	California saw-grass	None/none	2B.2
4	Coastal goosefoot	None/none	1B.2
5	Crisp monardella	None/none	1B.2
6	Dune larkspur	None/none	1B.2
7	Gambel's water cress	FE/ST	1B.1
8	Hoover's bent grass	None/none	1B.2
9	Kellogg's horkelia	None/none	1B.1
10	Marsh sandwort	FE/SE	1B.1
11	Nipomo Mesa ceanothus	None/none	1B.2
12	Nipomo Mesa lupine	FE/SE	1B.1
13	Pismo clarkia	FE/SR	1B.1
14	San Luis Obispo monardella	None/none	1B.2
15	San Luis Obispo owl's-clover	None/none	1B.2
16	Sand mesa manzanita	None/none	1B.2
17	Santa Margarita manzanita	None/none	1B.2
18	Southern curly-leaved monardella	None/none	1B.2

Legend

Project Location

5-Mile Radius

N

0 1 2 Miles

Dana Reserve
Map Center: 120.50293°W 35.04603°N
Nipomo, San Luis Obispo County

CNDDB GIS Data Last Updated: October 2020

TABLE 4. SPECIAL STATUS PLANT LIST – OBSERVED

	Scientific Name	Common Name	Federal/State Status Global/State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
1.	*Arctostaphylos rudis*	Sand Mesa Manzanita	-/- G2/S2 1B.2	Nov-Feb	Chaparral. Sandy soils. <380 m.	Present. Suitable sandy chaparral habitat is present in the Study Area and species was observed during surveys.
2.	*Ceanothus cuneatus* var. *fascicularis*	Sand buck brush	-/- G5T4/S4 4.2	Feb-Apr	Coastal chaparral. Sandy substrates. <275 m.	Present. Suitable habitat is present in the Study Area and species was observed during surveys.
3.	*Ceanothus impressus* var. *nipomensis*	Nipomo Mesa Ceanothus	-/- G3T2/S2 1B.2	Feb-Apr	Chaparral. Canyons, flats. Sandy substrates. <200 m.	Present. Suitable habitat is present in the Study Area and species was observed during surveys.
4.	*Clarkia speciosa* ssp. *immaculata*	Pismo Clarkia	FE/SR G4T1/S1 1B.1	May-Jul	Woodland edges, chaparral, disturbed grassland. Openings in sandy soil. < 100 m	Present. Suitable habitat is present in the Study Area and species was observed during surveys.
5.	*Horkelia cuneata* var. *puberula*	Mesa Horkelia	-/- G4T1/S1 1B.1	Feb-July	Coastal chaparral, woodland. Dry, sandy or gravelly sites. 70-870 m.	Present. Suitable habitat is present in the Study Area and species was observed during surveys.
6.	*Mucronea californica*	California Spineflower	-/- G3/S3 4.2	Mar-Aug	Chaparral, woodland, coastal scrub, grassland. Sandy soil. <1000 m.	Present. Suitable habitat is present in the Study Area and species was observed during surveys.
7.	*Piperia michaelii*	Michael's Rein-Orchid*	-/- G3/S3 4.2	April-Aug	Coastal scrub, woodland, chaparral. Generally on dry sites. <700 m.	Present. Suitable habitat is present in the Study Area and species was observed during surveys.
8.	*Prunus fasciculata* var. *punctata*	Sand Almond	-/- G5T4/S4 4.3	Mar-Apr	Coastal scrub, chaparral, woodland. Sandy flats. <200 m.	Present. Suitable habitat is present in the Study Area and species was observed during surveys.

TABLE 5. SPECIAL STATUS PLANT LIST – NOT DETECTED ONSITE

	Scientific Name	Common Name	Federal/State Status Global/State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
1.	*Agrostis hooveri*	Hoover's Bent Grass	-/- G2/S2 1B.2	Apr-Jul	Open chaparral, oak woodland. Dry sandy soils. <600 m.	High. Suitable habitat is present in the Study Area. CNDDB #8 located 3.8 (1988) miles west of Study Area.
2.	*Calandrinia breweri*	Brewer's Calandrinia	-/- G4/S4 4.2	Mar-Jun	Chaparral, coastal scrub. Disturbed sites, burns. Sandy to loamy soil. <1200 m.	Moderate. Suitable habitat is present in the Study Area. CCH record (1948) located 9.5 miles to the north west.
3.	*Chorizanthe rectispina*	Straight-Awned Spineflower	-/- G2/S2 1B.3	Apr-Jul	Chaparral, cismontane woodland, coastal scrub. In disintegrating shale, often on granite. 200-600 m.	Low. Marginal suitable habitat is present in the Study Area. CNDDB #20 (2003) located 7.3 miles to the north west.
4.	*Deinandra paniculata*	Paniculate Tarplant	-/- G4/S4 4.2	Mar-Dec	Grassland, open chaparral and woodland. Disturbed areas, often in sandy soils in mesic sites. <1320 m.	Low. Marginal suitable habitat is present in the Study Area and CCH record (RSA699628; 1935) is located ~5 miles to the west.
5.	*Delphinium parryi* ssp. *blochmaniae*	Dune Larkspur	-/- G4T2/S2 1B.2	Apr-Jun	Coastal chaparral and dunes. Sandy soils. <200 m.	High. Suitable habitat is present in the Study Area. CNDDB #23 (1936) located 1.5 miles to the east. Multiple CNDDB occurrences within near vicinity.
6.	*Erysimum suffrutescens*	Suffrutescent Wallflower	-/- G3/S3 4.2	Jan-Aug	Stabilized coastal sand dunes, coastal scrub. Coastal dunes and bluffs. <150 m.	Low. Study Area is inland of species known range and marginal suitable habitat present in the Study Area. CCH Record (UCSB041306; 1988) located >5 miles to west.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
7.	*Horkelia cuneata* var. *sericea*	Kellogg's Horkelia	-/- G4T1?/S1? 1B.1	Apr-Sep	Coastal scrub and dunes, coniferous forest, chaparral. Old dunes, coastal sandhills, openings in sand. <200 m.	High. Suitable habitat is present in the Study Area. CNDDB #4 (1969) located 1.8 miles to the west.
8.	*Monardella sinuata* ssp. *sinuata*	Southern Curly-Leaved Monardella	-/- G3T2/S2 1B.2	Apr-Sep	Chaparral, woodland, coastal sage scrub and dunes. Sandy soils, coastal strand, dune. <300 m	High. Suitable sandy chaparral and woodland habitats are present in the Study Area. CNDDB #28 (1948) located 2.7 miles to west.
9.	*Monardella undulata* ssp. *undulata*	San Luis Obispo Monardella	-/- G2/S2 1B.2	May-Sep	Coastal scrub, stabilized dunes. Stabilized sandy soils. <200 m.	High. Suitable habitat (stabilized sandy soil) is present in the Study Area. A portion of CNDDB #37 (1979) occurs within the Study Area to the south. Additional CCH records in the near vicinity.
10.	*Scrophularia atrata*	Black-Flowered Figwort	-/- G2?/S2? 1B.2	Mar-Jul	Coniferous forest, chaparral, coastal scrub, riparian scrub. Sand, calcium-diatom-rich soils, around swales. <400 m.	High. Suitable sandy coastal habitats are present in the Study Area. CNDDB #63 (2005) located 2.75 miles to the northwest.

See Section 1.8 for status and rank definitions. References: CCH 2021, CNDDB 2021b

3.6.2 Special Status Plants Discussion

Eighteen special status plant taxa could potentially occur in the Study Area based on analysis of their known ecological requirements and habitat conditions observed in the Study Area. Eight special status plant taxa were detected during 2017-2020 surveys. One federal and state listed plant, Pismo Clarkia, was detected during 2019 and 2020 surveys. A discussion of each taxon with their typical habitat, range, known occurrences, potential to occur onsite, and survey results for the Study Area are provided below. Figure 6A and Figure 6B shows mapped locations of sensitive plant taxa observed on an aerial photograph and topographic map respectively. Plants are listed in alphabetical order by scientific name.

Special Status Plant Taxa Observed

1. Sand Mesa Manzanita (*Arctostaphylos rudis*) is a CRPR 1B.2 species endemic to San Luis Obispo and Santa Barbara Counties. It is known to occur on sandy soils in maritime chaparral and coastal scrub habitats less than 380 meters elevation, and typically blooms between November and February. Sandy soil in the Study Area's chaparral and woodland habitats is highly suitable for this species. A portion of a known record (CNDDB #16) occurs in the Study Area. A total of 324 sand mesa manzanitas were detected in the Study Area during the 2017-2020 surveys. Individuals are scattered across the Study Area and the majority are less than two feet tall. Stumps appear to have been previously burned or masticated and are regenerating from underground root burls (Photo 11 and Photo 12).

Photo 11. Sand Mesa Manzanita individual observed within Study Area. June 9, 2020.

Photo 12. Sand Mesa Manzanita individual observed within Study Area, view east. June 9, 2020.

2. Sand Buck Brush (*Ceanothus cuneatus* var. *fascicularis*) is a CRPR 4.2 variety endemic to Santa Barbara and San Luis Obispo Counties. It is known to occur in coastal chaparral habitats on sandy soils below 275 meters elevation. It is an evergreen shrub that typically blooms between February and April. The sandy chaparral habitat in the Study Area is highly suitable for this taxon. A total of 20 sand buck brush shrubs were detected in the Study Area during the 2017-2020 surveys. Individuals predominantly occur in the northeastern portion of the Study Area and many are less than 4 feet tall (Photo 13 and Photo 14). A total of 16 CCH records exist within a 8-

quadrangle search, with aerial review depicting two records likely extirpated due to development/agriculture and all others presumed extant.

Photo 13. Sand buck brush individual observed within Study Area. June 3, 2020.

Photo 14. Sand buck brush observed within Study Area, view northwest. June 3, 2020.

3. Nipomo Mesa Ceanothus (*Ceanothus impressus* var. *nipomensis*) is a CRPR 1B.2 variety endemic to Santa Barbara and San Luis Obispo Counties. It is known to occur in chaparral habitats on sandy soils below 200 meters elevation. It is an evergreen shrub that typically blooms between February and April. The sandy chaparral habitat in the Study Area is highly suitable for this taxon. A total of 50 Nipomo Mesa Ceanothus shrubs were detected in the Study Area during the 2017-2020 surveys. Individuals predominantly occur in the northeastern portion of the Study Area and many are less than 4 feet tall (Photo 15 and Photo 16).

Photo 15. Nipomo Mesa Ceanothus individual observed within Study Area. June 3, 2020.

Photo 16. Nipomo Mesa Ceanothus observed within Study Area, view east. June 3, 2020.

4. Pismo Clarkia (*Clarkia speciosa* ssp. *immaculata*) is listed as Endangered under the federal Endangered Species Act (ESA), as Rare by the State of California under the Native Plant Protection Act (NPPA), and is a CRPR 1B.1 subspecies endemic to southern San Luis Obispo County. It is known to occur on sandy soils in disturbed grassland, openings in chaparral, and edges of woodland habitats below 100 meters elevation. It is an annual herb that typically blooms between May and July. The closest known records range from approximately 1.4 to 1.9 miles west of the Study Area (CNDDB #10, #16 and #17) and are reported as possibly extirpated. The closest known record presumed to be extant is approximately 3.1 miles northwest of the Study Area (CNDDB #21). The sandy soils in grassland, chaparral, and woodland habitats in the Study Area are highly suitable for this taxon. A reference site was visited, and confirmed Pismo clarkia was in bloom on May 18, June 1, June 12, and July 3, 2018, at the nearby known occurrence in Arroyo Grande (CNDDB #8). Pismo clarkia was detected in the Study Area during the 2019 and 2020 surveys (Photo 17, Photo 18, and photo 19). The occurrence consists of 8 micro-populations (patches) comprising 0.22 acres and occurs immediately south of a quarter-mile section of the main dirt access road in the central portion of the Study Area. A total of 6,139 individuals were counted on May 19th, 2020, when the population was assessed in peak bloom. Patch boundary extents were flagged by botanists and then recorded by licensed surveyor Aaron Harville (MBS Land Surveys, Figure 7) on June 3, 2020.

Photo 17. Pismo Clarkia with white and spotted patterns June 14, 2019

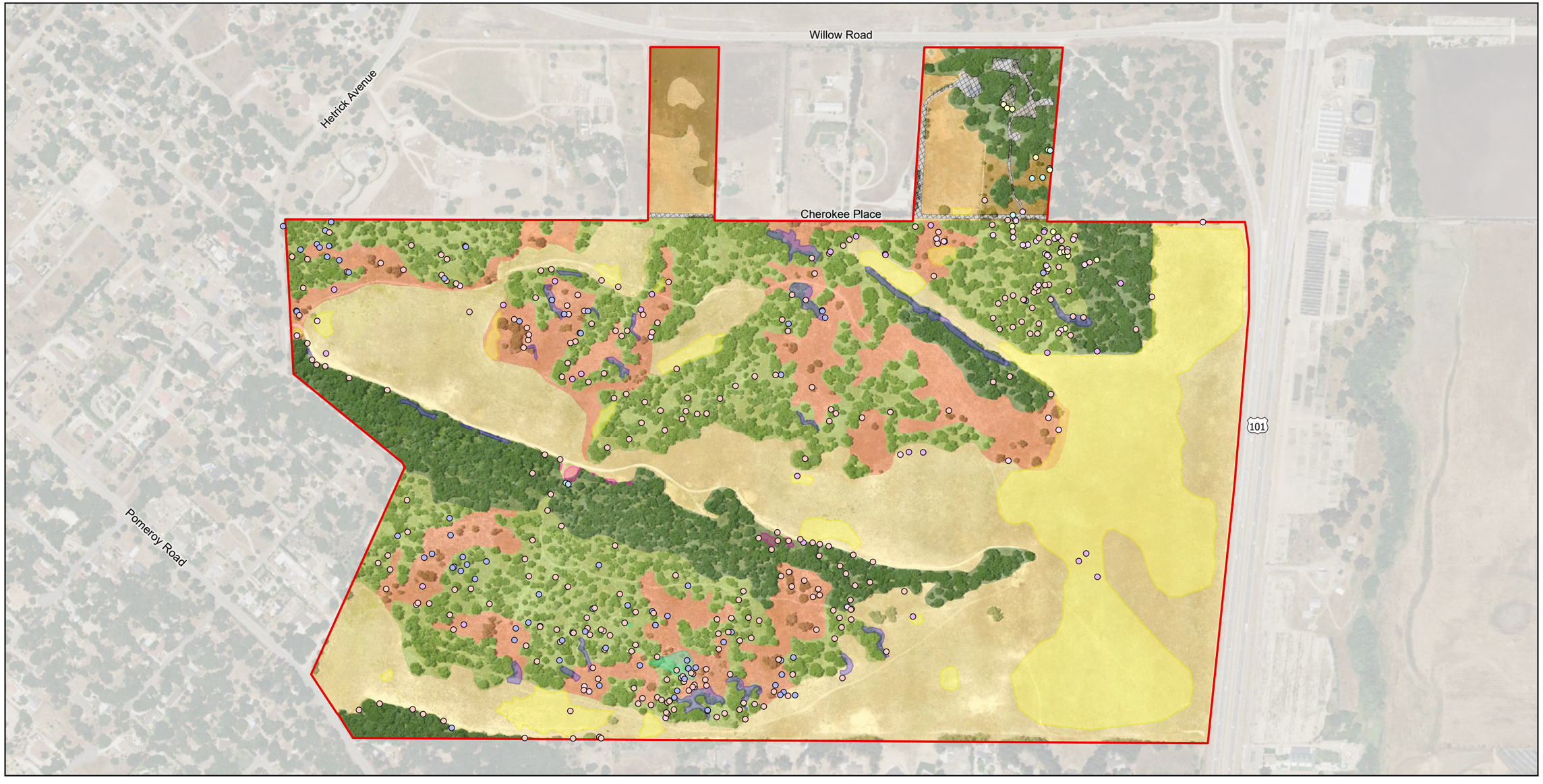
Photo 18. Pismo Clarkia Patch 1. View northeast from main ranch road. June 14, 2019.

Clarkia speciosa ssp. *immaculata* differs from the more abundant ssp. *speciosa* in having somewhat larger flowers with a different petal-color pattern (lacking a red spot); genetic studies (Lewis and Lewis 1955) showed "considerable" genetic differentiation between these two subspecies. The population growing on Dana Reserve contains both spotted and “immaculate” flowers in all patches.

The USFWS reported in their 1998 Recovery Plan that a small amount of seed from two populations is being maintained for conservation purposes in the long-term seed banking program at Rancho Santa Ana Botanic Garden. No other taxon-specific conservation efforts have been undertaken.

Photo 19. Patch 3 with botanist mapping distribution and density of Pismo Clarkia on May 19, 2020. View southeast.

Figure 6A. Biological Resources - Plants on Aerial



Legend

- Study Area
- Annual Brome Grasslands
- Anthropogenic
- Burton Mesa Chaparral* - S1
- California Perennial Grassland Group
- Coast Live Oak Forest
- Mediterranean California Naturalized Perennial Grassland
- Coast Live Oak Woodland* - S3

Species

- California Spineflower
- Mesa Horkelia
- Sand Mesa Manzanita
- Pismo Clarkia
- California spineflower
- Mesa horkelia
- Michael's rein orchid
- Nipomo mesa ceanothus
- Sand almond
- Sand buck brush
- Sand mesa manzanita

*Sensitive Natural Communities with State Rank

0 250 500 Feet

Dana Reserve
Map Center: 120.50364°W 35.04662°N
Nipomo, San Luis Obispo County

Imagery Source: USDA NAIP, 05/21/2020
Althouse & Meade Inc., 05/19/2020

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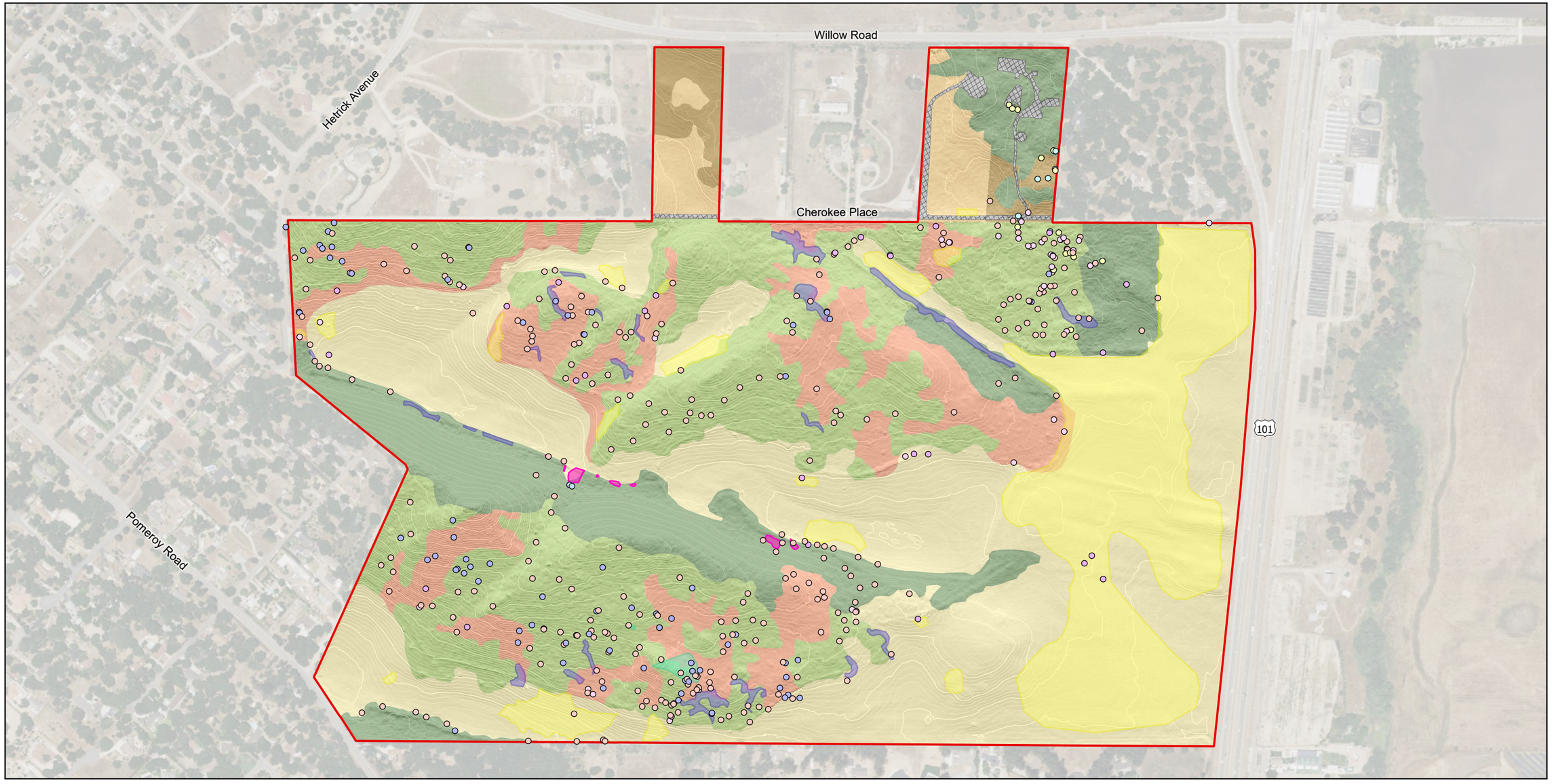
Map Updated:
October 06, 2021 12:47 PM by SAF

Figure 6B. Biological Resources - Plants on Topographic Map



Legend

- Study Area
- Annual Brome Grasslands
- Anthropogenic
- Burton Mesa Chaparral* - S1
- California Perennial Grassland Group
- Closed Oak Forest
- Mediterranean California Naturalized Perennial Grassland
- Open Oak Woodland* - S3

Species

- California Spineflower
- Mesa Horkelia
- Sand Mesa Manzanita
- Pismo Clarkia
- California spineflower
- Mesa horkelia
- Michael's rein orchid
- Nipomo mesa ceanothus
- Sand almond
- Sand buck brush
- Sand mesa manzanita
- 1-foot Contour

*Sensitive Natural Communities with State Rank

0 250 500 Feet

Dana Reserve
Map Center: 120.50364°W 35.04662°N
Nipomo, San Luis Obispo County

Contour Source: MBS Land Surveys
Imagery Source: USDA NAIP, 05/21/2020

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Map Updated:
October 06, 2021 12:46 PM by SAF

Figure 7. Pismo Clarkia Detailed Locations

Legend

Study Area

Pismo Clarkia (Clarkia speciosa ssp. immaculata) - FE/SE/1B.1

0 100 200 Feet

Dana Reserve
Map Center: 120.50374°W 35.04443°N
Nipomo, San Luis Obispo County

Imagery Source: Althouse & Meade Inc., 05/19/2020

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Map Updated:
October 06, 2021 12:45 PM by SAF

5. Mesa Horkelia (*Horkelia cuneata* var. *puberula*) is a CRPR 1B.1 variety endemic to the region from San Luis Obispo County to San Diego County. It occurs on sandy and gravelly substrates in coastal chaparral and woodland habitats between 70- and 870-meters elevation. It is a matted, perennial herb that typically blooms between February and July (Photo 20 and Photo 21). The closest known record is approximately 7.4 miles west of the Study Area (CNDDB #91). The sandy woodland and chaparral habitats in the Study Area are highly suitable for this variety. Approximately 7,553 Mesa horkelia rosettes were detected across the Study Area during the 2017-2020 surveys, predominantly within or near coast live oak woodland. Plants were frequently encountered along the dripline of oak tree canopy.

Photo 20. Mesa horkelia individual observed within Study Area. June 6, 2018.

Photo 21. Mesa horkelia individual observed within Study Area. June 9, 2020.

6. California Spineflower (*Mucronea californica*) is a CRPR 4.2 species that occurs from Monterey to San Diego Counties. It is an annual herb that grows in sandy soils in grassland, coastal scrub, woodland, and chaparral habitats below 1,000 meters elevation. It typically blooms between March and August. The sandy woodland, chaparral, and dune habitats in the Study Area are highly suitable for this species. California spineflower was abundant within the grassland habitat in the Study Area during the 2017-2020 surveys. The delicate plant was dispersed in a mosaic across approximately 42.6 acres. Distribution of these plants across the occupied habitat is patchy. Less than 15 percent of the absolute vegetative cover is California spineflower in occupied grassland habitat. This cover appears to vary significantly from year-to-year, depending on seasonal conditions and grazing intensity the previous year. The northeastern portion of the Study Area near Highway 101 supports the largest concentration of plants, with smaller patches scattered across the remainder of the site. Patch densities were variable (Photo 22 and Photo 23). Aerial review of historic CCH records within an 8-quad search of the Study Area reveals development and agriculture have substantially reduced the local extent of California spineflower.

Photo 22. Low-density California spineflower in grassland near Highway 101, view south. June 3, 2020.

Photo 23. Dense area of California spineflower in grassland near Highway 101, view southeast. June 3, 2020.

7. Michael's Rein Orchid (*Piperia michaelii*) is a CRPR 4.2 variety endemic to the region from San Luis Obispo County to San Diego County. It occurs in dry sites within coastal scrub, woodland, and chaparral below 700 meters elevation. It is a perennial herb that typically blooms between April and August. The coast live oak and chaparral habitats in the Study Area are highly suitable for this species. A total of 7 Michael's Rein Orchid individuals were detected in the Study Area in 2020. All individuals were located within 50 feet of Pismo Clarkia Patch 3 along the edge of coast live oak woodland in the central portion of the Study Area (Photo 24 and Photo 25).

Photo 24. Michael's rein orchid individual observed within Study Area. May 27, 2020.

Photo 25. Michael's rein orchid individual observed within Study Area. June 14, 2019.

8. Sand Almond (*Prunus fasciculata* var. *punctata*) is a CRPR 4.3 variety endemic to San Luis Obispo and Santa Barbara Counties. It is known to occur in sandy habitats in maritime chaparral, coastal dune and scrub, and woodland habitats below 200 meters elevation. It is a deciduous shrub that typically blooms between March and April but was observed blooming in the Study Area in early June. The sandy woodland, chaparral, and dune habitats in the Study Area are highly suitable for this taxon. Sand almond was detected in the Study Area during 2017-2020 surveys. A total of 141 sand almond plants were detected across the Study Area, primarily near the edges of the oak

woodland habitat (Photo 26 and Photo 27). A total of 10 CCH records are known within an 8-quadrangle search. Aerial review shows that two records in San Luis Obispo County are likely extirpated from development/agriculture.

Photo 26. Sand almond fruiting individual observed within Study Area. June 1, 2018.

Photo 27. Sand almond plants observed within Study Area, view south east. June 3, 2020.

Special Status Plant Taxa Not Observed

1. Hoover's Bent Grass (*Agrostis hooveri*) is a CRPR 1B.2 species endemic to San Luis Obispo and Santa Barbara Counties. It is known to occur in coastal mountains on dry sandy soils of woodlands, chaparral, and grasslands below 600 meters elevation. It is a perennial bunchgrass that typically blooms between April and July. The closest known record is approximately 3.8 miles west of the Study Area (CNDDB #8). The dry sandy soil within chaparral and coast live oak woodland in the Study Area provide highly suitable habitat for this species and it was assessed to have a High potential to occur. Hoover's bent grass was not detected in the Study Area during 2017-2020 surveys.

2. Brewer's Calandrinia (*Calandrinia breweri*) is a CRPR 4.2 species that occurs from Lake County to Baja California. It is known to inhabit disturbed, oftentimes burned, sites within maritime chaparral and coastal scrub at elevations below 1,200 meters. It is an annual herb that typically blooms between March and June. The closest known CCH record is approximately 9.5 miles northwest of the Study Area (SD71144; 1948). Although no records occur in the immediate vicinity, the disturbed sandy soil within chaparral and coast live oak woodland in the Study Area provide suitable habitat for this species and it was assessed to have a moderate potential to occur. Brewer's calandrinia was not detected in the Study Area during the during 2017-2020 surveys.

3. Straight-awned Spineflower (*Chorizanthe rectispina*) is a CRPR 1B.3 species endemic to Monterey, San Luis Obispo, and Santa Barbara Counties. It is known to occur on sand or gravel in open areas of chaparral, cismontane woodland, and coastal scrub habitats between 200- and 600-meters elevation. It is often found on granite. It is an annual herb that typically blooms between April and July. The closest known record is approximately 7.3 miles northwest of the Study Area (CNDDB #20). The dune sands in the Study Area are unlikely to support this species, which is most associated with sandy soils derived from decomposed granite. Consequently, marginal suitable habitat exists within the Study Area for this species and it was assessed to have a low potential to occur. Straight-awned spineflower was not detected in the Study Area during the during 2017-2020 surveys.

4. Paniculate Tarplant (*Deinandra paniculata*) is a CRPR 4.2 species known from the San Francisco Bay area south to northern Baja California. It is known to occur on sandy soils in grassland, coastal scrub, and sometimes in vernal pools below 1,320 meters elevation. It is an annual herb that typically blooms between May and November. The closest known record is an historical collection from 1935 and is located approximately 4.6 miles west of the Study Area (RSA699628; CCH 2021). This species is usually encountered in vernally mesic sites, which were not identified in the Study Area. Consequently, marginal suitable habitat exists within the Study Area for this species and it was assessed to have a low potential to occur. Paniculate tarplant was not detected in the Study Area during the during 2017-2020 surveys.

5. Dune Larkspur (*Delphinium parryi* ssp. *blochmaniae*) is a CRPR 1B.2 endemic to San Luis Obispo, Santa Barbara and Ventura Counties. It is known to occur in dune, coastal scrub, and maritime chaparral habitats below 200 meters elevation. It is a perennial herb that typically blooms between April and June. The closest known record is approximately 1.5 mile west of the Study Area (CNDDB #23; 1936) with additional occurrences nearby. The chaparral and openings in coast live oak woodland within the Study Area provide highly suitable habitat for this taxon which was assessed to have high potential to occur. Dune larkspur was not detected in the Study Area during the 2017-2020 surveys.

6. Suffrutescent Wallflower (*Erysimum suffrutescens*) is a CRPR 4.2 species endemic to coastal region from San Luis Obispo to San Diego Counties. It is known to occur in coastal scrub, maritime chaparral, and coastal bluff scrub habitat below 150 meters elevation. It is a perennial herb that typically blooms between January and August. The closest known record is an historical collection from 1937, approximately1.3 miles northwest of the Study Area (GH387468, CCH 2021). This species is typically associated with coastal sands and the Study Area is slightly inland of this species typical distribution. Marginal habitat for this species exists in the Study Area and it was assessed to have a low potential to occur. Suffrutescent wallflower was not detected in the Study Area during the 2017-2020 surveys.

7. Kellogg's Horkelia (*Horkelia cuneata* var. *sericea*) is a CRPR 1B.1 variety endemic to the region from Marin County south to Santa Barbara County. It is known to occur in sandy or gravelly substrates in coastal scrub, maritime chaparral, and closed-cone coniferous forest habitats between 70- and 870-meters elevation. It is a perennial herb that typically blooms between February and September. The closest known record is approximately 1.0 mile west of the Study Area (CNDDB #4; 1969). The sandy maritime chaparral habitats in the Study Area are highly suitable for this variety and it was assessed to have high potential to occur. Kellogg's horkelia was not detected in the Study Area during the 2017-2020 surveys.

8. Southern Curly-leaved Monardella (*Monardella sinuata* ssp. *sinuata*) is a CRPR 1B.2 subspecies that occurs from Monterey to Ventura County on sandy soils in dune, coastal strand, coastal chaparral and sagebrush scrub. It is a annual herb that flowers from April to September. The closest known record is approximately 2.7 miles west of the Study Area (CNDDB #28; 1948). The sandy chaparral habitat in the Study Area is highly suitable for this subspecies and it was assessed to have a high potential to occur. Southern curly-leaved monardella was not detected in the Study Area during the 2017-2020 surveys.

9. San Luis Obispo Monardella (*Monardella undulata* ssp. *undulata*) is a CRPR 1B.2 subspecies endemic to San Luis Obispo and Santa Barbara Counties. It is known to occur on sandy substrates in stabilized dune and coastal scrub habitats below 200 meters elevation. It is a rhizomatous perennial herb that typically blooms between May and September. The closest known

record occurs within the southern portion of the Study Area (CNDDB #37; 1979). The stabilized sandy dune habitat in the Study Area is highly suitable for this subspecies and it was assessed to have a high potential to occur within the Study Area. San Luis Obispo monardella was not detected in the Study Area during the 2017-2020 surveys.

10. Black-flowered Figwort (*Scrophularia atrata*) is a CRPR 1B.2 species endemic to Santa Barbara and San Luis Obispo Counties. It is known to occur in coast dune, coastal scrub, riparian scrub, chaparral, and closed-cone coniferous forest habitats below 400 meters elevation. It is a perennial herb that typically blooms between March and July. The closest known record is approximately 2.75 miles northwest of the Study Area (CNDDB #63). The sandy chaparral habitats in the Study Area are highly suitable for this species and it was assessed to have a high potential to occur. Black -flowered figwort was not detected in the Study Area during the 2017-2020 surveys.

3.6.3 Botanical Survey Results

The botanical surveys identified four rare shrubs (sand mesa manzanita, Nipomo mesa ceanothus, sand buck brush, and sand almond) and four rare herbs (Pismo clarkia, Michael's rein orchid, mesa horkelia, and California spineflower). Refer to Section 3.7.2 for discussion of rare plant taxa and Figure 6 for location data. Table 6 lists all 159 taxa observed during 2017, 2018, 2019 and 2020 inspections. The 159 species, subspecies and varieties of vascular plants identified at the Study Area consist of 97 native and 62 introduced taxa. The vascular plant list is separated into general life form categories, within which the taxa are listed alphabetically by scientific name.

TABLE 6. VASCULAR PLANT LIST

Scientific Name	Common Name	Special Status	Origin
Trees - 6 Species			
Acacia longifolia	Sydney golden wattle	--	Introduced
Pinus sp.	Pine	--	Planted/Escaped
Quercus agrifolia var. *agrifolia*	Coast live oak	--	Native
Schinus molle	Peruvian pepper tree	--	Introduced
Nicotiana glauca	Tree tobacco	--	Introduced
Shrubs - 17 Species			
Adenostoma fasciculatum	Chamise	--	Native
Arctostaphylos rudis	Sand mesa manzanita	CRPR 1B.2	Native
Artemisia californica	California sagebrush	--	Native
Baccharis pilularis	Coyote brush	--	Native
Ceanothus impressus var. *nipomensis*	Nipomo mesa ceanothus	CRPR 1B.2	Native
Ceanothus cuneatus var. *fascicularis*	Sand buck brush	CRPR 4.2	Native
Cercocarpus betuloides var. *betuloides*	Birch-leaf mountain-mahogany	--	Native
Ericameria ericoides	Mock heather	--	Native
Frangula californica	California coffee berry	--	Native
Heteromeles arbutifolia	Toyon	--	Native
Lupinus arboreus	Yellow bush lupine	--	Native
Prunus ilicifolia	Hollyleaf cherry	--	Native
Prunus fasciculata var. *punctata*	Sand almond	CRPR 4.3	Native

Scientific Name	Common Name	Special Status	Origin
Rhamnus crocea	Spiny redberry	--	Native
Salvia mellifera	Black sage	--	Native
Sambucus nigra ssp. *caerulea*	Blue elderberry	--	Native
Symphoricarpos mollis	Creeping snowberry	--	Native
Toxicodendron diversilobum	Western poison oak	--	Native
Forbs - 121 Species			
Acmispon americanus	American bird's foot trefoil	--	Native
Acmispon glaber	Deer weed	--	Native
Acmispon strigosus	Strigose lotus	--	Native
Acourtia microcephala	Sacapellote	--	Native
Amaranthus blitoides	Prostrate pigweed	--	Introduced
Ambrosia acanthicarpa	Annual bur-sage	--	Native
Ambrosia psilostachya	Ragweed	--	Native
Amsinckia menziesii	Common fiddleneck	--	Native
Anaphalis margaritacea	Pearly everlasting	--	Native
Aphanes occidentalis	Western lady's mantle	--	Native
Aphyllon tuberosum	Chaparral broomrape	--	Native
Asclepias eriocarpa	Kotolo	--	Native
Brassica nigra	Black mustard	--	Introduced
Calandrinia menziesii	Red maids	--	Native
Calyptridium monandrum	Common pussypaws	--	Native
Camissonia strigulosa	Sandysoil suncup	--	Native
Camissoniopsis hirtella	Hairy sun cup	--	Native
Camissoniopsis micrantha	Spencer primrose	--	Native
Capsella bursa-pastoris	Shepard's purse	--	Introduced
Cardamine oligosperma	Bitter cress	--	Native
Cardionema ramosissimum	Sand mat	--	Native
Carduus pycnocephalus ssp. *pycnocephalus*	Italian thistle	--	Introduced
Carex globosa	Round-fruited sedge	--	Native
Castilleja exserta ssp. *exserta*	Purple owl's-clover	--	Native
Centaurea benedicta	Blessed thistle	--	Introduced
Centaurea melitensis	Tocalote	--	Introduced
Cerastium glomeratum	Large mouse ears	--	Introduced
Chenopodium californicum	California goosefoot	--	Native
Chenopodium murale	Nettle leaf goosefoot	--	Introduced
Chorizanthe angustifolia var. *eastwoodiae*	Narrow-leaf spineflower	--	Native
Cirsium occidentale	Cobweb thistle	--	Native
Cirsium vulgare	Bull thistle	--	Introduced
Clarkia purpurea ssp. *viminea*	Wine cup Clarkia	--	Native
Clarkia speciosa ssp. *immaculata*	Pismo Clarkia	FE, SR, CRPR 1B.1	Native
Claytonia parviflora ssp. *parviflora*	Miner's lettuce	--	Native

Scientific Name	Common Name	Special Status	Origin
Corethrogyne filaginifolia	Common tansyaster	--	Native
Cotula australis	Australian cotula	--	Introduced
Crassula connata	Pygmy-weed	--	Native
Croton californicus	California croton	--	Native
Croton setiger	Turkey-mullein	--	Native
Cryptantha clevelandii var. *florosa [Cryptantha hispidissima]*	Coastal cryptantha	--	Native
Cuscuta occidentalis	California dodder	--	Native
Daucus pusillus	American wild carrot	--	Native
Deinandra increscens ssp. *increscens*	Grassland tarweed	--	Native
Dichelostemma capitatum ssp. *capitatum*	Blue dicks	--	Native
Diplacus aurantiacus	Sticky monkeyflower	--	Native
Eriastrum densifolium ssp. *densifolium*	Giant eriastrum	--	Native
Erigeron bonariensis	Flax-leaved horseweed	--	Introduced
Erigeron canadensis	Horseweed	--	Native
Eriogonum gracile var. *gracile*	Slender buckwheat	--	Native
Erodium botrys	Long beaked filaree	--	Introduced
Erodium brachycarpum	Short fruited filaree	--	Introduced
Erodium cicutarium	Redstem filaree	--	Introduced
Euphorbia peplus	Petty spurge	--	Introduced
Galium aparine	Goose grass	--	Native
Galium californicum	California bedstraw	--	Native
Gamochaeta ustulata	Featherweed	--	Native
Geranium molle	Crane's bill geranium	--	Introduced
Geranium rotundifolium	Round leaved geranium	--	Introduced
Helianthemum scoparium	Broom rose	--	Native
Hesperocnide tenella	Western nettle	--	Native
Heterotheca grandiflora	Telegraph weed	--	Native
Hirschfeldia incana	Mustard	--	Introduced
Horkelia cuneata var. *puberula*	Mesa horkelia	CRPR 1B.1	Native
Hypochaeris glabra	Smooth cat's-ear	--	Introduced
Lactuca serriola	Prickly lettuce	--	Introduced
Lamium amplexicaule	Henbit	--	Introduced
Lastarriaea coriacea	Leather-spineflower	--	Native
Lepidium nitidum	Shining pepperweed	--	Native
Lessingia glandulifera var. *glandulifera*	Sticky lessingia	--	Native
Logfia filaginoides	California cottonrose	--	Native
Logfia gallica	Daggerleaf cottonrose	--	Introduced
Lupinus bicolor	Miniature lupine	--	Native
Lupinus nanus	Sky lupine	--	Native
Lupinus truncatus	Blunt leaved lupine	--	Native
Lysimachia arvensis	Scarlet pimpernel	--	Introduced

Scientific Name	Common Name	Special Status	Origin
Malva neglecta	Common mallow	--	Introduced
Malva parviflora	Cheeseweed	--	Introduced
Marah fabacea	California man-root	--	Native
Marrubium vulgare	Horehound	--	Introduced
Melilotus indicus	Annual yellow sweetclover	--	Introduced
Melilotus officinalis	Yellow sweetclover	--	Introduced
Mucronea californica	California spineflower	CRPR 4.2	Native
Muilla maritima	Common Muilla	--	Native
Navarretia hamata	Hooked navarretia	--	Native
Nemophila pedunculata	Meadow nemophila	--	Native
Nuttallanthus texanus	Blue toadflax	--	Native
Oxalis pes-caprae	Bermuda buttercup	--	Introduced
Paeonia californica	California peony	--	Native
Pedicularis densiflora	Warrior's plume	--	Native
Phacelia ramosissima	Branching phacelia	--	Native
Phacelia tanacetifolia	Lacy phacelia	--	Native
Pholistoma auritum	Fiesta flower	--	Native
Piperia michaelii	Michael's rein orchid	CRPR 4.2	Native
Plantago erecta	California plantain	--	Native
Plantago lanceolata	English plantain	--	Introduced
Pseudognaphalium californicum	Ladies' tobacco	--	Native
Pseudognaphalium luteoalbum	Jersey cudweed	--	Introduced
Pterostegia drymarioides	Fairy mist	--	Native
Raphanus sativus	Wild radish	--	Introduced
Rumex acetosella	Sheep sorrel	--	Introduced
Salvia columbariae	Chia sage	--	Native
Senecio vulgaris	Common groundsel	--	Introduced
Silene gallica	Small-flower catchfly	--	Introduced
Silene laciniata	Cardinal catchfly	--	Native
Silybum marianum	Milk thistle	--	Introduced
Sinapis arvensis	Charlock	--	Introduced
Sisymbrium irio	London rocket	--	Introduced
Solanum americanum	Common nightshade	--	Native
Solanum xanti	Chaparral nightshade	--	Native
Sonchus oleraceus	Common sow thistle	--	Introduced
Spergula arvensis	Stickwort	--	Introduced
Stellaria media	Common chickweed	--	Introduced
Stephanomeria elata	Santa Barbara stephanomeria	--	Native
Stephanomeria virgata	Rod wirelettuce	--	Native
Trifolium hirtum	Rose clover	--	Introduced
Uropappus lindleyi	Silver puffs	--	Native
Urtica urens	Dwarf nettle	--	Introduced

Scientific Name	Common Name	Special Status	Origin
Veronica peregrina ssp. *xalapensis*	Hairy purslane speedwell	--	Native
Vicia sativa	Common vetch	--	Introduced
Vicia villosa	Hairy vetch	--	Introduced
Graminoids – 15 Species			
Avena fatua	Wild oat	--	Introduced
Brachypodium distachyon	Purple false brome	--	Introduced
Bromus diandrus	Ripgut grass	--	Introduced
Bromus hordeaceus	Soft chess	--	Introduced
Bromus madritensis ssp. *rubens*	Red brome	--	Introduced
Distichlis spicata	Salt grass	--	Native
Ehrharta calycina	Perennial veldt grass	--	Introduced
Festuca myuros	Rattail six weeks grass	--	Introduced
Festuca perennis	Italian ryegrass	--	Introduced
Gastridium phleoides	Nit Grass	--	Introduced
Hordeum murinum	Wall barley	--	Introduced
Lamarckia aurea	Goldentop grass	--	Introduced
Melica imperfecta	Coast range melic	--	Native
Poa annua	Annual blue grass	--	Introduced
Schismus arabicus	Arabian schismus	--	Introduced

3.7 Wildlife Resources

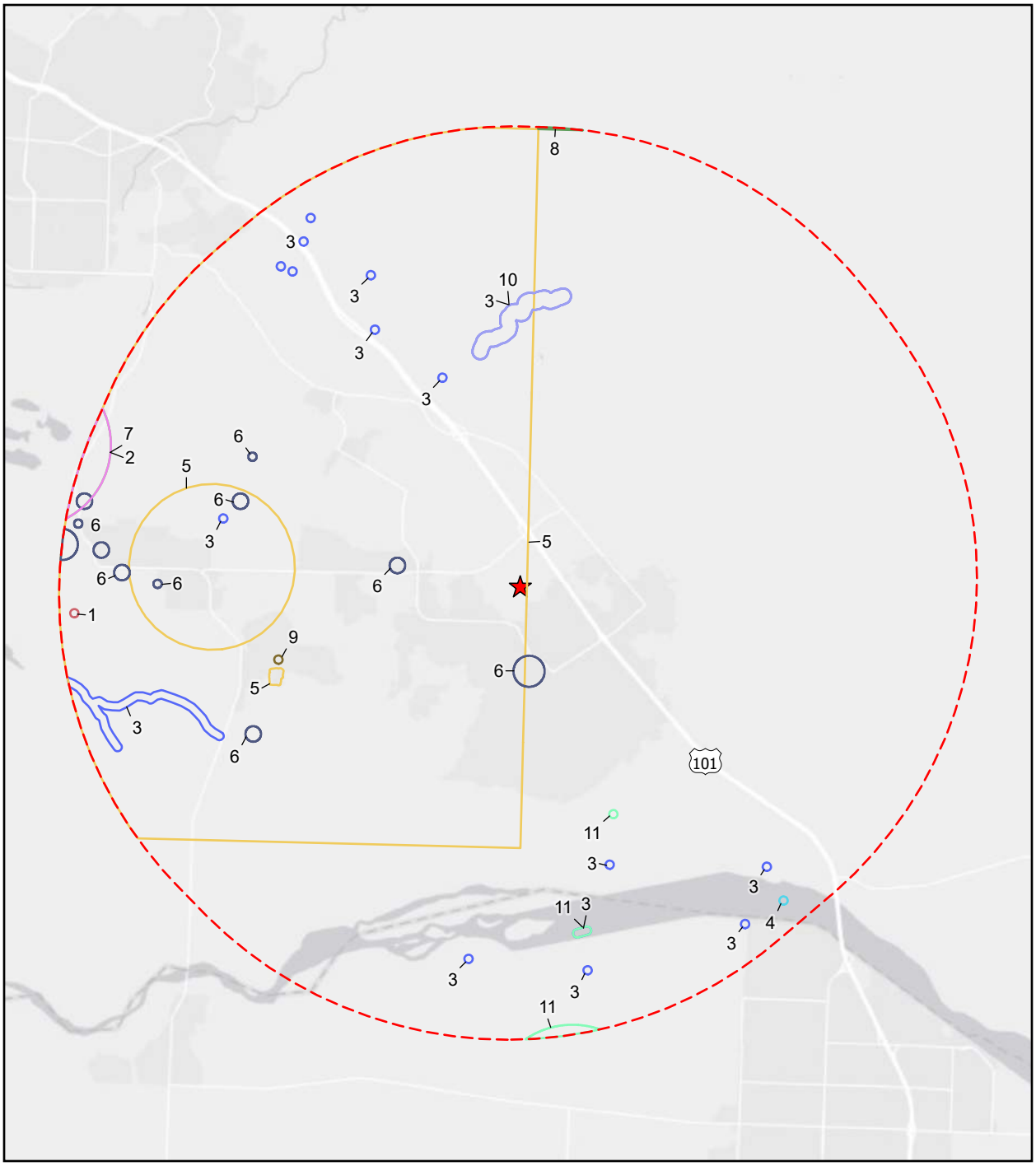
Research on special status animal occurrences conducted within the designated search area (see Methods) determined 47 special status animal species are known to occur in the region (Appendix D). Figure 8 and Figure 9 depict the current GIS data for special status animal species mapped near the Study Area by CNDDB and USFWS Critical Habitat (June 3, 2020).

Within an 8-quad search radius around the Study Area, 17 special status animals could potentially occur. Animal species' potential to occur is based on animal habitat requirements and ecology. For information regarding special status designations refer to Section 1.9. A discussion of the 17 animal taxa with potential to occur is provided in Section 3.7.2.

3.7.1 Potential Special Status Animal Species

Table 7 lists 10 special status animals detected onsite, and **Error! Reference source not found.** lists 8 special status animal species for which appropriate habitat conditions exist, and therefore could potentially occur in the Study Area. Federal and California State status, global and state rank, and CDFW listing status for each species are given. Typical nesting or breeding period, habitat (CNDDB 2021b) preference, potential for occurrence onsite, detection of the species within the Study Area, and effect of proposed activity are also provided. Species are listed alphabetically by scientific name, first by those detected (Table 7), and **Error! Reference source not found.** for those not detected during 2017-2020 surveys.

Figure 8. California Natural Diversity Database Animal Records



Label	Common Name	Federal/State Status
1	American badger	None/none
2	California black rail	None/ST
3	California red-legged frog	FT/none
4	Coast horned lizard	None/none
5	Monarch butterfly	None/none
6	Northern California legless lizard	None/none
7	Obscure bumble bee	None/none
8	Prairie falcon	None/none
9	Sharp-shinned hawk	None/none
10	Steelhead trout	FT/none
11	Western spadefoot	None/none

Legend

Project Location 5-Mile Radius

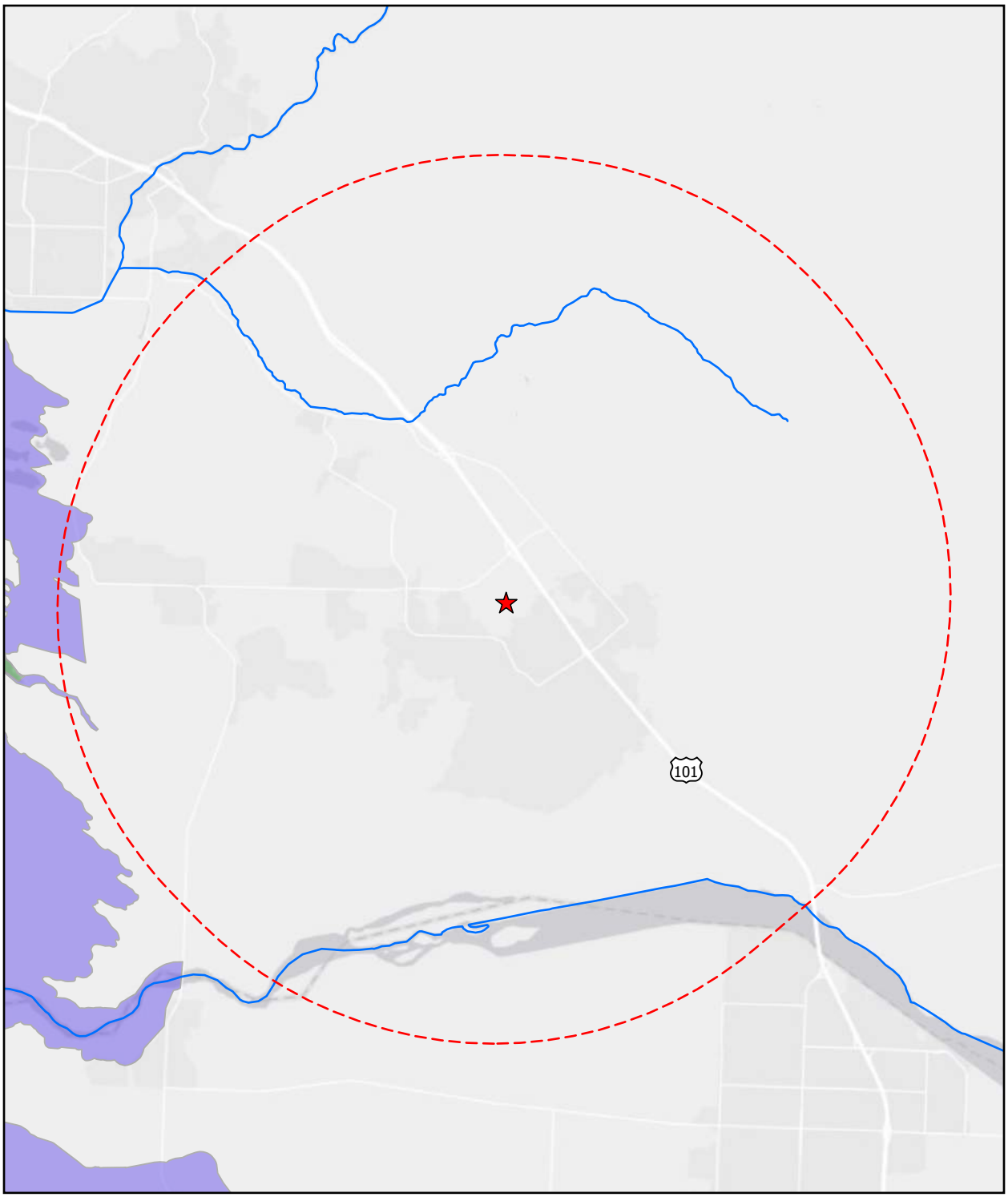
N

0 1 2 Miles

Dana Reserve
Map Center: 120.50293°W 35.04603°N
Nipomo, San Luis Obispo County

CNDDB GIS Data Last Updated: October 2020

Figure 9. USFWS & NMFS Critical Habitat



Legend

- Project Location
- 5-Mile Radius
- NMFS Critical Habitat
- Steelhead Trout
- USFWS Critical Habitat
- La Graciosa thistle
- Tidewater goby

N

0 1 2 Miles

Dana Reserve
Map Center: 120.50293°W 35.04603°N
Nipomo, San Luis Obispo County

USFWS/NMFS Data Last Updated: April, 2021

TABLE 7. SPECIAL STATUS ANIMAL LIST – DETECTED ONSITE

	Scientific Name	Common Name	Federal/State Status Global/State Rank CDFW Status	Habitat Preference	Potential to Occur
1.	*Accipiter cooperii*	Cooper's Hawk	-/- G5/S4 WL (nesting)	Oak woodland, riparian, open fields, Nests in dense trees, especially coast live oak.	Present. This species was observed during 2020 surveys foraging in the coast live oak woodland habitat.
2.	*Antrozus pallidus*	Pallid Bat*	-/- G5/S3 SSC	Rock crevices, caves, tree hollows, mines, old buildings, and bridges.	Present. Limited roosting habitat (no structures and few tree cavities) in the Study Area. Vocalizations detected during 2020 acoustic surveys
3.	*Baeolophus inornatus*	Oak titmouse*	-/- G4/S4 USFWS BCC: WL (nesting)	Nests in cavities in oak woodland habitat. Non-migratory.	Present. Numerous oak titmice were observed during 2017, 2018, 2019, and 2020 surveys.
4.	*Elanus leucurus*	White-tailed Kite	-/- G5/S3S4 FP	Nests in dense tree canopy near open foraging areas	Present. Nests in dense tree canopy near open foraging areas. Suitable nesting and foraging habitat are available in the Study Area.
5.	*Lasiurnus noctiyagans*	Silver-haired Bat*	-/- G3G4/S3S4 SSC	Coastal and montane forests, often feeds over water. Roosts in hollow trees, loose bark, woodpecker cavities, rarely in rocks.	Present. Suitable roosting and foraging habitat are available in the Study Area. Vocalizations detected during 2020 acoustic surveys.
6.	*Lasiurus cinereus*	Hoary Bat*	-/- G5/S5 SA	Forages in open habitats or habitat mosaics with trees. Roosts in dense foliage of medium to large trees. Feeds on moths. Requires water.	Present. Suitable habitat is available in the Study Area. Vocalizations detected during 2020 acoustic surveys
7.	*Myotis yumanensis*	Yuma Myotis*	-/- G5/S5 SA	Caves, mines, buildings, tree cavities, rock crevices, or under bridges. Feeds near open water	Present. Suitable habitat is available in the Study Area. Vocalizations detected during 2020 acoustic surveys.
8.	*Phrynosoma blainvillii*	Blainvilles's [Coast] Horned Lizard	-/- G3G4/S3S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Present. Two observations; suitable habitat is available in the Study Area.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CDFW Status	Habitat Preference	Potential to Occur
9.	*Picoides nuttallii*	Nuttall's Woodpecker*	-/- G4G5/ USFWS BCC	Oak, riparian woodlands	Present. Nuttall's woodpecker is a year-round resident of oak woodland habitat onsite and was observed during 2017, 2018, 2019, and 2020 surveys.
10.	*Taxidea taxus*	American Badger	-/- G5/S3 SSC	Needs friable soils in open ground with abundant food source such as California ground squirrels.	Present. Several dens observed; suitable grassland habitat and ground squirrels in the Study Area.

See Section 1.8 for status and rank definitions.

TABLE 8. SPECIAL STATUS ANIMAL LIST – NOT DETECTED

	Scientific Name	Common Name	Federal/State Status Global/State Rank CDFW Status	Habitat Preference	Potential to Occur
1.	*Accipiter striatus*	Sharp-Shinned Hawk	-/- G5/S4 WL	Riparian, coniferous, and deciduous woodlands near water.	Moderate. Suitable prey (passerines) is available in the Study Area.
2.	*Anniella pulchra*	Northern California Legless Lizard	-/- G3/S3 SSC	Sandy or loose loamy soils under coastal scrub or oak trees. Soil moisture essential.	High. Suitable habitat is available in the Study Area.
3.	*Athene cunicularia*	Burrowing Owl	-/- G4/S3 SSC	Burrows in squirrel burrow complexes in open habitats with low vegetation.	Low. Suitable habitat (grazed grassland and squirrel burrows) available in the Study Area.
4.	*Bombus caliginosus*	Obscure Bumble Bee	-/- G4?/S1S2 SA	Open coastal grasslands and meadows. Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia.	Low. Habitat and nectar sources potentially suitable. Sensitive invertebrate surveys provided negative results for this species.
5.	*Bombus occidentalis*	Western Bumble Bee	-/CCE G2G3/S1 SA	Wide variety of natural, agricultural, urban, and rural habitats. Flower-rich meadows of forests and subalpine zones.	Low. Suitable habitat is available in the Study Area. Closest known historical occurrence is located 14 miles northwest (CNDDB #279). Focused sensitive invertebrate surveys provided negative results for this species.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CDFW Status	Habitat Preference	Potential to Occur
6.	*Danaus plexippus pop. 1*	Monarch - California Overwintering Population	-/- G4T2T3/S2S3 SA	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Low. Suitable habitat is not available in the Study Area, eucalyptus adjacent to property may be suitable.
7.	*Lasiurus blossevillii*	Western Red Bat*	-/- G5/S3 SSC	Roosts primarily in trees, from sea level up through mixed conifer forests.	High. Suitable habitat is available in the Study Area. Not detected during 2020 acoustic surveys.
8.	*Spinus lawrencei*	Lawrence's goldfinch (Nesting)**	-/- G3G4/S3/S4 SA,BCC	Arid and open woodlands within near vicinity of chaparral or other brushy areas; tall annual weed fields; and a water source such as a stream, small lake, or farm pond. Live oaks (Quercus spp.) and blue oaks (Q. douglasii) are predominant trees where this species nests (Linsdale 1950, Coutlee 1968).	Low. Marginally suitable nesting habitat is present in the oak woodland habitat onsite. This species is absent from Ebird records from nearby Nipomo Regional Park 2018-2020. Ebird range distribution map shows species' range in lower densities in coastal lowland areas. There are CNDDB records for this species, but not within the 8-quad search.

See Section 1.8 for status and rank definitions

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3.7.2 Special Status Animals Discussion

Based on an analysis of known ecological requirements for the special-status wildlife species reported or known from the region (Appendix D), and the habitat conditions that were observed during onsite surveys, it was determined that 8 special status animal species have potential to occur and 10 species were present within the Study Area (Cooper's hawk, pallid bat, oak titmouse, white-tailed kite, silver-haired bat, hoary bat, Yuma myotis, Blainville's [coast] horned lizard, Nuttall's woodpecker, and American badger). Two species (northern California legless lizard and western red bat) have a high potential to occur, one species (sharp-shinned hawk) has a moderate potential to occur, and five species (burrowing owl, obscure bumble bee, western bumble bee, monarch butterfly, and Lawrence's goldfinch) have a low potential to occur in the Study Area. No federally or state listed Animals were detected in the Study Area. A total of 18 species are discussed below, including description of habitat, range restrictions, known occurrences, and survey results for the Study Area. The first 10 animals were detected onsite, and the other 8 were not detected.

1. Cooper's Hawk (*Accipiter cooperii*) is a CDFW Watch List species (for nesting occurrences only) that occurs regularly in California during the winter months and during spring and fall migration (CNDDB 2021b). It is generally regarded as a regular but uncommon nesting species in San Luis Obispo County (Hall et al. 1992). Cooper's hawks frequent oak and riparian woodland habitats, and increasingly urban areas, where they prey primarily upon small birds (Curtis et al. 2006). A Cooper's hawk was observed foraging overhead during the 2020 site surveys.

2. Pallid Bat (*Antrozous pallidus*) is a California Species of Special Concern with a global rank of 5 (secure) and state rank of 3 (vulnerable). The pallid bat is a large long-eared bat that occurs throughout the state and occupies a wide variety of habitats. Although most common in open, dry areas ideal for foraging with rocky outcrops for roosting, pallid bats are also found regularly in oak and pine woodlands where they roost in caves, mines, rock crevices, hollow trees and buildings Nowak and Walker 1994). Bridges are also frequently used by pallid bats, often as night roosts between foraging periods (Pierson et al. 1996). There were no CNDDB records for the pallid bat in the 8-quad search, which is likely due to their nocturnal activity patterns and requirement for focused surveys. Due to presence of large coast live oak trees and sparsely vegetated habitats suitable for foraging, the pallid bat has a high potential to occur in the Study Area. A focused survey for bat roosts and species identification was conducted as part of this study. Pallid bats were observed visually and acoustically during the emergence survey.

3. Oak Titmouse (*Baeolophus inornatus*) is on the CDFW Watchlist and is a USFWS bird of conservation concern (USFWS 2008) due to loss of nesting habitat. Oak titmouse has a global and state rank of 4 (apparently secure). The oak titmouse is an oak woodland obligate, nesting in cavities of oak trees. It is a common species in oak woodlands on the central coast but is tracked by CDFW due to state-wide losses of oak woodland habitat. The oak titmouse nests in oak woodland habitat. There are no CNDDB occurrence records within the 8-quad search radius, however, oak titmouse is a year-round resident in the coast live oak woodland habitat onsite. Numerous oak titmice were observed during 2017-2020 surveys. Pre-construction surveys are recommended prior to activities that affect oak trees.

4. White-tailed Kite (*Elanus leucurus*) is a CDFW Fully Protected species with a global rank of G5 (stable) and a state rank of S3S4 (vulnerable, apparently secure). White-tailed kites occur throughout California, but they are known to forage and nest in certain areas of California in

fluctuating numbers (Lehman 2018, CDFW 2016). White-tailed kites nest primarily in evergreen trees, especially coast live oaks, near meadows, marshes, farmland or grasslands where they forage on small animals, especially voles (*Microtus californicus*; Dunk 1995). Communal nocturnal roosts sites, which may shift in location, are often used from early fall to early winter. The closest reported occurrence of nesting white-tailed kites is approximately 15.2 miles northeast of the Study Area (CNDDB #169). The 2017 record is a nesting pair in an oak tree. The tree is in a riparian open space corridor located in a residential development that is also adjacent to vineyards and pastureland. White-tailed kites were observed on the property during 8/29/2019 site surveys.

5. Silver-haired Bat (*Lasionycteris noctivagans*) is a CDFW Species of Special Concern with a global rank of G3G4 (vulnerable, apparently secure) and a state rank S3S4 (vulnerable, apparently secure). Silver-haired bat is a forest-dwelling species generally concentrated in the northern half of the state. However, there are reports of this species in San Luis Obispo, Santa Barbara, and Ventura counties. This species was detected acoustically at three locations on Vandenberg Air Force Base in 1997 and 1998 (Pierson et al. 2002). There were no CNDDB records for the silver-haired bat in the 8-quad search. Silver-haired bats roost almost exclusively in trees, using woodpecker hollows and flaking bark. They forage above the canopy, in clearings, and in riparian corridors along water courses. Oak woodlands provide suitable roosting habitat and open fields provide suitable foraging habitat. Silver-haired bats were confirmed present during 2020 nighttime acoustic surveys.

6. Hoary Bat (*Lasiurus cinereus*) is a Special Animal tracked by CDFW with a global and state rank of 5 (secure). It is widely distributed throughout most of California, though it is uncommon in southeastern deserts. Roosting habitat is primarily woodlands and forests, and it forages for moths in open areas and along habitat edges (CDFW 2016). Hoary bats roost mainly in dense foliage of medium to large deciduous or coniferous trees, near the ends of branches, typically in trees at the edge of a clearing. Roosting has also been documented in caves, under rock ledges, and in tree hollows (Bolster 2005). There were no CNDDB records for hoary bat in the 8-quad search, which is likely due to their nocturnal activity patterns and requirement for focused surveys. Suitable roosting habitat is present in oak woodlands and open areas provide suitable foraging habitat. Hoary bats were confirmed present during 2020 nighttime acoustic surveys.

7. Yuma Myotis (*Myotis yumanensis*) is a Special Animal tracked by CDFW. The Yuma myotis is a small bat widely distributed throughout western North America. This species of bat is most commonly associated with man-made structures. Crevices are preferred roost areas including those found in cliffs, buildings and bridges, but they will also roost in trees (Bogan et al. 2005). Yuma myotis is most closely associated with water for foraging compared to other any other bat species. There were no CNDDB records for the Yuma myotis in the 8-quad search, but it has been recorded at seven localities within San Luis Obispo County (Pierson et al. 2002). Oak woodlands onsite provide suitable roosting habitat and foraging aquatic resources occur in the vicinity of the Study Area. Yuma myotis were observed during 2020 nighttime acoustic surveys.

8. Blainville's Horned Lizard [Coast Horned Lizard] (*Phrynosoma blainvillii*) is a California Species of Special Concern with a global rank of G3G4 (vulnerable, apparently secure) a state rank of S3S4 (vulnerable, apparently secure). Blainville's horned lizard is distributed from northern Baja California through Northern California, occurring in open areas of valley foothill hardwood, conifer, riparian, pine-cypress, juniper and annual grassland habitats (CDFW 2007). Blainville's horned lizard needs friable sandy soil with rocks and logs essential for burrows and reproduction (CDFW 2007, Gerson 2011). Appropriate habitat for Blainville's horned lizard must

include an abundance of the native harvester ant (*Pogonomyrmex* and *Messor* sp.). Non-native Argentine ants (*Linepithema humile*) are detrimental to Blainville's horned lizard food resources, as they outcompete the native harvester ant, and the lizard will not eat the Argentine ant (CNDDB 2021b, Gerson 2011). Very little data exists on the habitat requirement for reproduction of Blainville's horned lizard; however, it has been reported that in southern California the egg-laying season is from late May through June (CDFW 2016). The closest CNDDB occurrence of Blainville's horned lizard is a 2008 record approximately 4.6 miles southeast of the Study Area on the south side of the Santa Maria River, 0.7 mile west of U.S. Highway 101 (CNDDB #675); four adults were observed in sandy soils with coyote brush, willow, and mulefat. The Study Area has suitable sandy soils and habitat for Blainville's horned lizard. Two Blainville's horned lizards were observed in the Study Area in 2018 and 2020 (Photo 28).

Photo 28. Blainville's horned lizard a CDFW species of special concern (SSC) observed in coast live oak woodland habitat in Study Area. May 18, 2018.

9. Nuttall's Woodpecker (*Picoides nuttallii*) has a global rank of G4G5 (apparently secure, secure; NatureServe Explorer 2018a), state rank S4 (apparently), and is a USFWS bird of conservation concern (BCC; USFWS 2018). Its current range limited to California which extends from the lower elevations of the Cascade-Sierra Nevada crest to the coast. This range also extends as far north as Humboldt County and as far south as San Diego County. Suitable habitats for Nuttall's woodpecker include riparian, deciduous, and oak woodland where it forages for invertebrates in the oak bark and takes cover in the leafy foliage and tree cavities. The breeding season is from late March to early July. As a primary cavity nester, Nuttall's woodpecker is important to other cavity nesting birds (Monahan and Koenig 2006). It excavates nesting cavities in the dead limbs of oak, cottonwood, willow, alder and sycamore. Nuttall's woodpecker eats mostly insects but will also eat nuts, sap berries and poison-oak seeds (CDFW 2016). Nuttall's woodpecker is a year-round resident of oak woodland habitat onsite and was observed during 2017-2020 surveys.

10. American Badger *(Taxidea taxus)* is a California Species of Special Concern with a widespread range across the state (Brehme et al. 2015, CDFW 2016). It is a permanent but uncommon resident in all parts of California, except for forested regions of the far northwestern corner, and is more abundant in dry, open areas of most shrub and forest habitats (CNDDB 2021b). The American badger requires friable soil to dig burrows for cover and breeding. The main food source for the species is fossorial rodents, mainly ground squirrels and pocket gophers (CDFW

2016). The breeding season for badgers is in summer and early fall, and females give birth to litters usually in March and April (CDFW 2016). The closest reported CNDDB occurrence of the American badger is located approximately 5.1 miles from the project (CNDDB #391), where an adult badger was observed at a den in the Oceano Dunes State Vehicular Recreation Area. Eight badger dens were documented in the Study Area during 2018 and 2020 surveys (Photo 29 and Figure 10). Due to presence of suitable habitat with friable soils, and observations of badger dens onsite, American badger presence onsite is confirmed. During 2020 surveys, two wildlife cameras placed along game trails April 15-May 6, 2020 did not record American badgers on either camera.

Photo 29. American Badger (SSC) den in perennial grassland, view southwest. April 14, 2018.

Special Status Animal Taxa Not Observed

1. Northern California Legless Lizard (*Anniella pulchra*) is a California Species of Special Concern that occurs from Contra Costa to Santa Barbara County. It has a Global Rank of G3 and a State Rank of S3, both of which indicate that this species is considered vulnerable. This species includes the subspecies formerly treated as *A. pulchra nigra* and *A. pulchra pulchra*, an invalid designation (Pearse and Pogson 2000). Northern California legless lizard inhabits friable soils in a variety of habitats from coastal dunes to oak woodlands and chaparral. Adapted to subterranean life, the legless lizard thrives near native coastal shrubs that produce an abundance of leaf litter and have strong roots systems (Kuhnz et al. 2005). Areas of exotic vegetation and open grassland do not provide suitable habitat for the silvery legless lizard since these plant communities support smaller populations of insect prey and offer little protection from higher ground temperatures and soil desiccation (Jennings and Hayes 1994; Slobodchikoff and Doyen 1977). Ten CNDDB records for northern California legless lizard were found in the 8-quad search radius. The closest reported occurrence of the northern California legless lizard is located approximately 0.9-mile northwest of the Study Area where two individuals were collected from the vicinity of Misty Glen Place at Willow Road in 1985 and 1986 (CNDDB #183). Chaparral and coast live oak woodland habitats in the Study Area are very likely to support northern California legless lizard. No northern California legless lizards were encountered during 2020 focused surveys despite intensive raking effort. Coverboards will be periodically inspected throughout the rest of 2020. None were detected as of July 21, 2020.

2. Western Red Bat (*Lasiurus blossevillii*) is a CDFW Species of Special Concern with a global rank of 5 (secure) and a state rank of 3 (vulnerable). In California, roosting habitat includes forests and woodlands from lowlands up through mixed conifer forests of mountains; foraging habitat includes grasslands, shrublands, open woodlands and forests, and croplands, but not deserts (CDFW 2016). Western red bats in California are strongly associated with riparian habitats, particularly mature stands of cottonwood/sycamore in the Central Valley and lower reaches of the large rivers that drain the Sierra Nevada (Pierson et al. 2006). There were no CNDDB records for western red bat in the 8-quad search, which is likely due to their nocturnal activity patterns and requirement for focused surveys, rather than absence. No western red bats were detected during 2020 nighttime acoustic surveys.

3. Sharp-Shinned Hawk (*Accipiter striatus*) has a secure global rank (G5) and a state rank of S4 (apparently secure), suggesting this species is uncommon but not rare with some cause for long-term concern due to declines or other factors. The sharp-shinned hawk is a CDFW Watch List species (for nesting occurrences only). It frequents open oak and riparian woodland habitats. It is a regular fall and winter migrant in San Luis Obispo County that seldom remains in the area through the nesting season. Sharp-shinned hawks prefer to nest in dense, closed canopy forests. Sharp-shinned hawks are unlikely to nest onsite but may forage for passerines in habitats found onsite. The nearest reported occurrence of nesting sharp-shinned hawks is a 2003 record, approximately 2.4 miles southwest of the Study Area (CNDDB #9). Sharp-shinned hawks were not observed on the Property during site surveys 2017-2020.

4. Burrowing Owl (*Athene cunicularia*) is a California Species of Special Concern with a global rank of G4 (apparently secure) and a state rank of S3 (vulnerable). The burrowing owl is a small, rare owl that occupies abandoned mammal holes in the ground, most notably those of the California ground squirrel. In California, the burrowing owl is a year-round resident in the Carrizo Plain, Central Valley, Imperial Valley and the San Francisco Bay region. In the winter months, burrowing owl individuals from other western populations will augment the year-round Californian populations (Shuford and Gardali 2008). The breeding season is generally from March through August. Suitable habitat types for the burrowing owl are dry, open annual or perennial grasslands and deserts with an abundance of burrows (CNDDB 2021b, CDFW 2016). More specifically, the owl is found in coastal prairie, coastal scrub, great basin, Mojavean and Sonoran Desert scrub and great basin, valley and foothill grassland habitats (CNDDB 2021b). The burrowing owl may also inhabit badger and fox dens and man-made holes, such as pipes and culverts. Rarely, it has been known to dig its own burrow in softer soil types (Coulombe 1971, Gervais et al. 2008). Burrows with high horizontal visibility and low vegetation coverage are preferred but burrows with dense vegetation with high perch sites will be used (Green and Anthony 1989). Orthoptera are the main food source for the owl but it also consumes other insects, as well as amphibians, carrion, small mammals, reptiles, and birds (Gervais et al. 2008, York et al. 2002, CDFW 2016). The closest of the four reported occurrences of the burrowing owl is approximately 7.5 miles (southwest) of Project (CNDDB #1803). The 2009 observation was an adult burrowing owl occupying a ground squirrel burrow in an open field surrounded by commercial and agricultural development west of Santa Maria. Due to presence of ground squirrel burrows and grazed perennial grassland in the Study Area, the site could support burrowing owls. Burrowing owls were not observed on the Property.

5. Obscure Bumble Bee (*Bombus caliginosus*) is designated by CDFW as a Special Animal and has a global rank of G4? and a state Rank of S1S2 (CNDDB 2021b). The global rank indicates

that the species is apparently secure with some uncertainty. The species is uncommon but not rare, though there is some cause for long-term concern due to declines or other factors such as climate change, habitat loss, and disease (Williams and Osborne 2009; Fürst et al. 2014; Graystock et al. 2014). The "?" added to the G4 rank represents more certainty than a G4G5 rank (apparently secure, secure), but less certainty than G4 (apparently secure). The state rank of S1S2 is indicative of uncertainty regarding whether this species is critically imperiled or imperiled, meaning the taxon is between rare and extremely rare due to steep declines, restricted range, minimal populations (5-20 or fewer), and/or other factors making it very vulnerable to extirpation from the state. The obscure bumble bee is considered uncommon throughout its range, which stretches along the Pacific Coast from southern British Columbia to southern California with scattered occurrence records from the east side of California's Central Valley. Obscure bumble bee inhabits open coastal grasslands and meadows with colonies occurring underground and/or in abandoned bird's nests. Obscure bumblebee is known to have occurred along the west coast of the United States from the Olympic peninsula to south Los Angeles County, and inland to the Sierra foothills in some Great Valley locations. The Xerces Society states, "Analyses suggest very high population decline range-wide, including range size reductions, persistence reductions, and relative abundance declines." (Xerces 2020). The range of *B. caliginosus* has apparently contracted from inland areas (Hatfield et al. 2014). Obscure bumblebee is a California Department of Fish and Wildlife Species of Special Concern and is Vulnerable according to the International Union for the Conservation of Nature (IUCN). There are four records of CNDDB occurrences from 1954 to 1973. The closest occurrence is a 1973 record from Dune Lakes approximately 3 miles south of Oceano and approximately 4.7 miles east of the Study Area (CNDDB #166). Obscure bumblebee workers would have been present in the wildflower field during the sensitive invertebrate survey if a colony were within reach of the survey area. Bumblebees (*Bombus terrestris*) have been located up to 631 meters (~0.4 mile) from their colony to forage on flowers (Osborne et al. 1999). The only species of bumblebee found during the 2020 focused survey was yellow-faced bumblebee (*Bombus vosnesenskii*). Obscure bumblebee was not found on the property during the appropriately timed 2020 survey.

6. Western Bumble Bee (*Bombus occidentalis*) is neither federally nor state listed; however, it is a designated Sensitive Species under the United States Forest Service (USFS) and has a global rank of G2G3 (imperiled, vulnerable) and a state rank of S1 (critically imperiled). According to NatureServe Explorer (2018b), the overall global rank of the species must be G4 because one or two of the subspecies appears to be secure based on substantial information from 2009 and more recently. However, western bumble bee is not secure in most of its range (Cameron et al. 2011). Though once widespread, disease is stipulated as the cause of the precipitous decline in this species from southern British Columbia to central California. The only reported occurrence within the 8-quad search radius is a 1936 record of a specimen collected from the historic community of Miles near Avila Beach, approximately 13.6 miles northwest of the Study Area (CNDDB #279). Presence of perennial grasslands and wildflowers in the Study Area may support western bumble bee; however, workers would have been present in the wildflower field during the sensitive invertebrate survey if a colony were within reach of the survey area. Bumblebees (*Bombus terrestris*) have been located up to 631 meters (~0.4 mile) from their colony to forage on flowers (Osborne et al. 1999). The only species of bumblebee found during focused survey was yellow-faced bumblebee. Western bumblebee was not found at the Study Area during appropriately timed 2020 survey.

7. Monarch Butterfly (*Danaus plexippus*) is a CDFW Special Animal with a global rank of G4T2T3 (apparently secure). Taxa which are subspecies or varieties receive a T-rank attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies. Therefore, the T2T3 global status of *D. plexippus* population 1 is imperiled, vulnerable. The state rank is S2S3 (imperiled, vulnerable).

Monarch butterflies migrate in the fall to wintering locations along the coast of central and southern California, and mainland Mexico. Monarch butterflies aggregate in eucalyptus, Monterey pine, Monterey cypress, and less commonly oak trees (CNDDB 2021b). The Nipomo Mesa is largely under-surveyed for monarch butterfly aggregation sites because most of the land is privately owned.

There are 21 CNDDB occurrences of monarch butterfly aggregation sites in the 8-quad search radius (CNDDB 2021b), two of which, list the entire Oceano quad, where the Study Area is located as an aggregation site because the records contain suppressed sensitive locational data (CNDDB #320, #399). As of 2014 both aggregation sites are presumed extant. The next nearest aggregation site is a 1983 record of a eucalyptus grove, located 2.2 miles west of the Study Area, believed to be extirpated by development and gradual reduction of the grove since 1994 (CNDDB #129).

A line of eucalyptus trees south of and outside of the Study Area contains marginal habitat for aggregating monarch butterflies (Dr. Daniel Meade, personal communication; Photo 30). This site is not documented as harboring an aggregation of monarch butterflies.

Photo 30. Eastern portion of the Study Area, view southeast across field of pink California spineflower. June 3, 2020.

8. Lawrence's goldfinch (*Spinus lawrencei*) is a Special Animal tracked by the CNDDB that nests in oak habitats in the mountain areas of northern and eastern San Luis Obispo County, and elsewhere in California. Flocks of Lawrence's goldfinches tend to be highly mobile, moving to seasonal food sources. Marginally suitable nesting habitat is present in the oak woodland habitat onsite. This species is absent from Ebird records from nearby Nipomo Regional Park 2018-2020. Ebird range distribution map shows species' range in lower densities in coastal lowland areas. There are CNDDB records for this species, but not within the 8-quad search.

3.7.3 Wildlife Survey Results

Wildlife species detected in the Study Area include 10 invertebrates, 4 reptiles, 67 birds, and 17 mammals. Ten special status animals observed onsite include: Cooper's hawk, pallid bat, silver-haired bat, hoary bat, Yuma myotis, Blainville's horned lizard, oak titmouse, white-tailed kite,

Nuttall's woodpecker, and American badger. Figure 10 documents sensitive status animal and nest observations. Refer to Section 3.7.3 for discussion of special status wildlife.

A list of wildlife taxa observed in the Study Area are provided in Table 9. We provide this list as a guide to wildlife observed in the Study Area and for species that could potentially be present, at least seasonally. Some species, particularly bats and birds, may occur as transients.

The following wildlife were detected during 2017-2020 surveys. The Special Status column indicates listing status of animals under the Federal Endangered Species Act, the California Endangered Species Act, and CDFW. Taxa are arranged by scientific name.

TABLE 9. WILDLIFE LIST

Common Name	Scientific Name	Special Status	Habitat Type
Invertebrates – 13+ Species			
European Honeybee	*Apis mellifera*	--	Diverse habitats, agricultural land, gardens
Yellow-Faced Bumblebee	*Bombus vosnesenskii*	--	Open grassy areas, urban parks and gardens, chaparral and shrub areas, and mountain meadows
Leafcutter Bee	*Chelostoma sp.*	--	Diverse habitats, nest in rotting wood, gardens, agricultural land
Robber Flies (2 sp.)	*Family Asillidae*	--	Arid sunny habitats
Flower Flies (3 sp.)	*Family Syrphidae*	--	Diverse habitats
Small Heliothodes Moth	*Heliothodes diminutivus*	--	Dry grasslands at low elevations
Buckeye Butterfly	*Junonia coenia*	--	Open, sunny landscapes, old fields, roadsides, gardens, parks, yards, fallow agricultural land, scrubs, pine savannas, and weedlots
Cuckoo Wasp	*Omalus sp.*	--	Diverse habitats
Flies (many species)	*Order Diptera*	--	All habitats
Acmon Blue Butterfly	*Plebejus acmon*	--	Desert, fields, prairie hills, weedy areas, road edges.
Reptiles – 4 Species			
Northern Pacific Rattlesnake	*Crotalus oreganus*	--	Dry, rocky habitats
Blainville's (Coast) Horned Lizard	*Phrynosoma blainvillii*	**SSC**	Dune scrub, alkali scrub, chaparral, grasslands
Coast Range [=Western] Fence Lizard	*Sceloporus occidentalis bocourtii*	--	Wide range; variety of habitats

Common Name	Scientific Name	Special Status	Habitat Type
Side-blotched Lizard	*Uta stansburiana*	--	Dry habitats
Birds – 67 Species			
Cooper's Hawk	*Accipiter cooperii*	SA (nesting)	Oak, riparian woodland
White-throated Swift	*Aeronautes saxatilis*	--	Nests in cliffs
Red-winged Blackbird	*Agelaius phoeniceus*	--	Marshes, fields
California Scrub-jay	*Aphelocoma californica*	--	Oak, riparian woodlands
Oak Titmouse	*Baeolophus inornatus*	SA (nesting)	Oak woodland
Great Horned Owl	*Bubo virginianus*	--	Woodland, grassland
Red-tailed Hawk	*Buteo jamaicensis*	--	Open, semi-open country
Red-shouldered Hawk	*Buteo lineatus*	--	Oak, riparian woodlands
California Quail	*Callipepla californica*	--	Shrubby habitats
Anna's Hummingbird	*Calypte anna*	--	Many habitats
Turkey Vulture	*Cathartes aura*	--	Open country
Hermit Thrush	*Catharus guttatus*	--	Woodland and brush
Swainson's Thrush	*Catharus ustulatus*	--	Mixed woodlands
Vaux's swift	*Chaetura vauxi*	--	Near stream valleys and towns, nests in hollow trees
Lark Sparrow	*Chondestes grammacus*	--	Woodland edges
Rock Pigeon	*Columba livia*	--	Urban areas
American Crow	*Corvus brachyrhynchos*	--	Many habitats, esp. urban
White-tailed Kite	*Elanus leucurus*	G5/S3S4 FP	Evergreen woodlands near meadows, marshes, farmland or grasslands
Pacific-slope Flycatcher	*Empidonax difficilis*	--	Riparian, oak woodlands
Hammond's Flycatcher	*Empidonax hammondii*	--	Coniferous or mixed forests
American Kestrel	*Falco sparverius*	--	Open, semi-open country
MacGillivray's Warbler	*Geothlypis tolmiei*	--	Oak, riparian woodlands
House Finch	*Haemorhous mexicanus*	--	Riparian, grasslands, chaparral, woodlands, urban
Barn Swallow	*Hirundo rustica*	--	Riparian, grasslands, lakes
Bullock's Oriole	*Icterus bullockii*	--	Oak, riparian woodlands
Dark-eyed Junco	*Junco hyemalis*	--	Oak woodland

Common Name	Scientific Name	Special Status	Habitat Type
Acorn Woodpecker	*Melanerpes formicivorus*	--	Oak woodland, urban areas with oaks
Lincoln's Sparrow	*Melospiza lincolnii*	--	Dense brushy areas, willow thickets, often near water
California Towhee	*Melozone crissalis*	--	Chaparral scrub, shrubby urban areas
Northern Mockingbird	*Mimus polyglottos*	--	Riparian, chaparral, woodlands, urban
Ash-throated Flycatcher	*Myiarchus cinerascens*	--	Open, arid habitats
Orange-crowned warbler	*Oreothlypis celata*	--	Oak and riparian woodlands
Band-tailed Pigeon	*Patagioenas fasciata*	--	Woodlands, urban trees
Cliff Swallow	*Petrochelidon pyrrhonota*	--	Urban; open areas near water
Black-headed Grosbeak	*Pheucticus melanocephalus*	--	Woodlands
Nuttall's Woodpecker	*Picoides nuttallii*	G4G5/S4 USFWS BCC	Oak, riparian woodlands
Hairy Woodpecker	*Picoides villosus*	--	Oak, riparian woodlands
Spotted Towhee	*Pipilo maculatus*	--	Dense brushy areas
Western Tanager	*Piranga ludoviciana*	--	Oak, riparian woodlands
Blue-gray gnatcatcher	*Polioptila caerulea*	--	Chaparral
Bushtit	*Psaltriparus minimus*	--	Woodlands, chaparral
Ruby-crowned Kinglet	*Regulus calendula*	--	Oak, riparian woodlands
Black Phoebe	*Sayornis nigricans*	--	Near water in natural and urban settings
Say’s Phoebe	*Sayornis saya*	--	Open country, grassland
Yellow-rumped Warbler	*Setophaga coronata*	--	Coniferous and mixed woodland (breeding); shrubby areas and parks (winter)
Black-throated Gray Warbler	*Setophaga nigrescens*	--	Oak, riparian woodlands
Townsend's Warbler	*Setophaga townsendii*	--	Riparian, oak woodlands
Western Bluebird	*Sialia mexicana*	--	Woodland near open areas
Red-breasted Nuthatch	*Sitta canadensis*	--	Coniferous and mixed woodlands
Lesser Goldfinch	*Spinus psaltria*	--	Riparian, oak woodlands
American Goldfinch	*Spinus tristis*	--	Weedy fields, woodlands
Western Meadowlark	*Sturnella neglecta*	--	Open habitats, grasslands

Common Name	Scientific Name	Special Status	Habitat Type
European Starling	*Sturnus vulgaris*	--	Agricultural, livestock areas
Tree Swallow	*Tachycineta bicolor*	--	Oak, riparian woodlands, open areas near water
Bewick's Wren	*Thryomanes bewickii*	--	Riparian woodland, scrub
House Wren	*Troglodytes aedon*	--	Shrubby areas
American Robin	*Turdus migratorius*	--	Streamsides, woodlands, urban parks
Western Kingbird	*Tyrannus verticalis*	--	Grasslands, savannah
Cassin's Kingbird	*Tyrannus vociferans*	--	Open and semi-open areas
Barn Owl	*Tyto alba*	--	Agricultural, woodlands
Cassin's Vireo	*Vireo cassinii*	--	Confierous and mixed woodlands
Warbling Vireo	*Vireo gilvus*	--	Oak, riparian woodlands
Hutton's Vireo	*Vireo huttonii*	--	Oak, riparian woodlands
Wilson's Warbler	*Wilsonia pusilla*	--	Oak, riparian woodlands
Mourning Dove	*Zenaida macroura*	--	Open and semi-open habitats
Golden-crowned Sparrow	*Zonotrichia atricapilla*	--	Dense woodlands, brushy areas
Mammals – 17 Species			
Pallid Bat	*Antrozous pallidus*	G5/S3 SSC	Rock crevices, caves, tree hollows, mines, old buildings, and bridges
Cattle	*Bos taurus*	--	Agricultural fields, annual grasslands
Coyote	*Canis latrans*	--	Open woodlands, brushy areas, wide ranging.
Heermann's Kangaroo Rat	*Dipodomys heermanni*	--	Deserts, grasslands, semiarid areas
Big Brown Bat	*Eptesicus fuscus*	--	Deciduous forest areas, also in habitats ranging from timberline meadows to lowland deserts
Silver-haired Bat	*Lasionycteris noctivagans*	G3G4/S3S4 SSC	Coniferous or mixed coniferous and deciduous forests
Hoary Bat	*Lasiurus cinereus*	G5/S5 SA	Variety of habitats, roosts in foliage
Black-tailed Jackrabbit	*Lepus californicus*	--	Grasslands
California Myotis	*Myotis californicus*	--	Tunnels, hollow trees, buildings, bridges

Common Name	Scientific Name	Special Status	Habitat Type
Yuma Myotis	*Myotis yumanensis*	G5/S5 SA	Caves, mines, buildings, tree cavities, rock crevices, or under bridges. Feeds near open water.
Big-eared Woodrat	*Neotoma macrotis*	--	Oak woodland, riparian woodland
California Ground Squirrel	*Otospermophilus beecheyi*	--	Grassland, chaparral, and seral stage forests
Deer Mouse	*Peromyscus maniculatus*	--	All dry land habitats
Mexican Free-tailed Bat	*Tadarida brasiliensis*	--	Variety of habitats; roosts in bridges, buildings, caves
American Badger	*Taxidea taxus*	SSC	Open country
Valley Pocket Gopher	*Thomomys bottae*	--	Variety of habitats

Sensitive Invertebrates

Target pollinator plants included blunt leaved lupine (*Lupinus truncatus),* yellow bush lupine (*Lupinus arboreus*)*,* coastal cryptantha (*Cryptantha clevelandii* var. *florosa*)*,* and purple clarkia (*Clarkia purpurea* ssp. *quadrivulnera*)*.* Other field wildflowers in bloom included owl's clover (*Castilleja exserta* ssp. *exerta*)*,* miniature lupine (*Lupinus bicolor*), black sage (*Salvia mellifera*), and deerweed (*Acmispon glaber*)*.* Ten bumblebees were captured by netting and two specimens were collected for vouchers. Bumblebee identification followed descriptions in Williams, Thorp, Richardson and Colla (2014). All bumblebees were examined prior to release and were identified as yellow-faced bumblebee (*Bombus vosnesenskii*), a common species. No other bumblebee species was found. Very few native bees were observed or captured. Only one other native bee, a Megachile (leafcutter bee), *Chelostoma* sp. was found in sweeps. One cuckoo wasp (*Omalus* sp. [tentative], Chrysididae), metallic green, very tiny (3mm length), was collected. Many European honeybees were foraging in the wildflower fields. Many flower flies (Syrphidae), robber flies (Asillidae), and other flies (Diptera)- were captured. Most insects were released. A buckeye butterfly (*Junonia coenia*), three Acmon blue butterflies (*Plebejus acmon*) and one small Heliothodes moth (*Heliothodes diminutivus*) were captured in the sweeps and released.

Obscure bumblebee workers would have been present in the wildflower field during the survey period if a colony were within reach of the survey area. Bumblebees (*Bombus terrestris*) have been measured ranging up to 631 meters (~0.4 mile) from their colony to forage on flowers (Osborne et al. 1999). The only species of bumblebee found was yellow-faced bumblebee. Obscure bumblebee was not found on the property during an appropriately timed survey.

Northern California Legless lizard

Coverboards were left in place for a few months to create suitable microclimate for legless lizards. Coverboards will be monitored periodically through 2020. No legless lizards have been observed as of July 21, 2020.

Bats

A total of seven bat species were detected during May 26-29, 2020, acoustic monitoring survey (Table 10). The number of audio detections is not indicative of the number of bats present, but rather the number of vocalizations positively identified by the acoustic monitors, therefore a small number of bats could be responsible for many vocalizations. A total of 5 bats were observed during the emergence survey, one pallid bat, one large unidentified bat, and two smaller unidentified bats.

TABLE 10. SUMMARY OF ACOUSTIC BAT DETECTIONS

Common Name	Special Status	Number of Acoustic Detections
Pallid Bat	G5/S3 SSC	7
Big Brown Bat	--	25
Silver-haired Bat	G3G4/S3S4 SSC	2
Hoary Bat	G5/S5 SA	30
California Myotis	--	11
Yuma Myotis	G5/S5 SA	8
Mexican Free-tailed Bat	--	121
TOTAL		**204**

Mexican free-tailed bats were the dominant species detected during the acoustic surveys with 109 (59%) total detections, followed by silver-haired bat with 30 (15%) detections, and big brown bat with 25 (12%) detections. Mexican free-tailed bats are an abundant species with no special protection status. Mexican free-tailed bats roost in large numbers in caves and rock crevices on cliff faces and in manmade structures such as abandoned mines and tunnels, highway bridges and large culverts, buildings, and bat houses.

The silver-haired bat is a medium-sized bat with black or dark brown hairs that are silver-tipped. It is a forest-dwelling species generally thought to be concentrated in the northern half of the state and considered relatively uncommon throughout much of its range. There are reports of this species in San Luis Obispo, Santa Barbara, and Ventura counties. This species typically roosts in trees and has also been observed using structures such as attics and sheds. Silver-haired bats may roost in tree cavities or under loose tree bark onsite.

The big brown bat is a medium to large sized bat that has a wide distribution extending from Canada to northern South America. They are considered common within their range and tend to roost in man-made structures such as bridges, barns, and attics. They are known to forage only a few kilometers from their roost sites where they feed primarily on heavy-bodied insects. Big brown bats typically hibernate in small groups during winter months, but in the warmer southwestern portion of their range, they may not hibernate at all. Females roost communally with males at hibernation sites during the winter and roost separately from males in spring and summer.

Big brown bats may roost in old structures could potentially roost in structures in or near the Project site.

The number of acoustic detections for the remaining four species, ranged from 1 to 5 percent per species: California myotis 11 detections, Yuma myotis 8 detections, pallid bat 7 detections, hoary bat 2 detections.

The California myotis is a small, common bat that occupies many different habitats from British Columbia to western Texas. They immerge from day roosts soon after sunset and typically feed on moths and flies. Breeding takes place in fall and females give birth to a single offspring in July. They have been known to roost in a variety of substrates including caves, mines, rock crevices, tree hollows, under loose tree bark, and inside structures. Potential roosting habitat is present in large oak trees, groves, snags, and structures on the Project site.

The Yuma myotis primarily roosts in buildings and bridges, but may also use cliff crevices, mines, caves, and trees. This species is strongly associated with permanent sources of water, usually rivers and streams, which do not occur on the property. Mating occurs in fall, and females give birth between mid-spring and mid-summer in maternal colonies of up to several thousand. Males tend to roost singly in the summer. Potential roosting habitat is present in structures onsite, but maternity roosts are unlikely due to the colonial habits of females and lack of available large roosting areas.

The pallid bat is primarily a crevice-roosting species and selects roosts where they can retreat from view. Pallid bats prefer rocky outcroppings but may be found regularly in oak and pine woodland habitats where they roost in caves, mines, rock crevices, hollow trees, and buildings (Nowak and Walker 1994). Maternity colonies typically form starting in April, averaging 12 to 100 bats, and disband in late August. Young are born in May and June. Communal wintering or maternity colonies are more common in rock crevices and caves

The hoary bat is a CDFW Special Animal because there is a need for more research on the ecology of this species, and it is vulnerable to collisions with wind turbines in the western United States. Hoary bats roost in tree foliage and tree cavities, preferably away from developed areas. They are found year-round in California with the highest occurrences in winter, the season in which breeding occurs. Hoary bats prefer both deciduous and coniferous forests and prefer to roost in the dense foliage of medium to large trees with a water source in the vicinity. Hoary bats emerge in the late evening to feed, typically on moths. Potential roosting habitat is present in tree cavities in and near the Project site.

The low numbers of total detections over three nights of acoustic monitoring indicate that trees at Dana Reserve are not heavily utilized by bats for roosting sites. Bats detected during the survey were likely utilizing the property for foraging. The detector placed closer to U.S. 101 only picked up 15% of the detections and five of the seven species found onsite. Results may be due to sound interference from traffic or disturbance thresholds of bats. The detector placed in the interior of the Study Area picked up all seven species and 85% of the vocalizations.

Of the seven bat species detected at Dana Reserve in 2020, four are listed by CDFW as Species of Special Concern or Special Animals. Potential roosting habitat is present in or near the Project site for all the detected bat species. Potential roosting habitat is limited primarily to a few structures on the small northeast 7-acre parcel and coast live oak trees that will be removed. Potential roost habitat within the Project site is not likely to harbor maternity colonies of any bat species due to

limited infrastructure and cavity suitability limitations. Bats could roost singly or in small groups in trees that are scheduled for removal.

3.7.4 Habitat Connectivity and Wildlife Movement

The Study Area is bounded by roadways and residential properties, with poor to limited connectivity to open space for most wildlife. There is limited open space connectivity in the greater surrounding environs. Rural residential parcels along the northwest boundary of the Study Area (Cherokee Place) may provide moderate opportunity for wildlife movement between the Study Area and an undeveloped parcel north of Willow Road. U.S. Highway 101 restricts eastward movement of mammals and reptiles from the Study Area. Small residential parcels along the southeastern and southwestern boundaries of the Study Area inhibit wildlife movement south or west from the Study Area. Additionally, there are no undeveloped open space parcels or wildlife corridors available for wildlife movement south and west of the Study Area.

Figure 10. Biological Resources - Animals

Legend

- Study Area
- Annual Brome Grasslands
- Anthropogenic
- Burton Mesa Chaparral* - S1
- California Perennial Grassland Group
- Closed Oak Forest
- Mediterranean California Naturalized Perennial Grassland
- Open Oak Woodland* - S3
- Badger Den
- Blainville's Horned Lizard
- Woodrat Midden

Nests

- Acorn Woodpecker
- American Crow
- Blue-Gray Gnatcatcher
- Dark-eyed Junco
- Great Horned Owl
- House Finch
- Nest Cavity
- Raptor Nest
- Red-Tailed Hawk
- Stick Nest

N

0 500 1,000 Feet

Dana Reserve
Map Center: 120.50326°W 35.04678°N
Nipomo, San Luis Obispo County

Imagery Sources: USDA NAIP, 05/21/2020
Althouse & Meade Inc., 05/19/2020

*Sensitive Natural Communities with State Rank

4 ENVIRONMENTAL IMPACT ANALYSIS AND MITIGATION

4.1 Impacts and Mitigation Overview

This section includes an analysis of potential impacts to habitat, botanical, and wildlife resources from the proposed subdivision (Project), as well as from the alternative project plan (Alternative). Mitigation recommendations are provided for proposed impacts to biological resources from both the Project and the Alternative. The Project proposes to us a northern access to Dana Reserve from Willow Road through a heavily wooded parcel (091-301-030), and to maximize residential development and park improvements. Whereas the Alternative proposes northern access from Willow Road through a more disturbed parcel (091-301-029) with fewer oaks than parcel -030, and to preserve some oak forest and woodland habitat by reduced residential and parkland improvements compared to the Project.

4.1.1 CEQA Thresholds

CEQA threshold triggers listed in Appendix G, Biological Resources Section IV were considered throughout this analysis. General Plan policies were applied to thresholds. Does the project:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

   Thresholds:

   - Direct impacts to special status taxa and/or their protected habitat condition (e.g., nesting birds) listed in Table 11
   - Loss of 10 percent of sensitive population on subject property
   - No net loss of sensitive habitat acreage, values, and function (Policy BR1.4)
   - Maintain acreage of native woodlands (Policy BR 3.2)

2. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

   Threshold:

   - Loss of 10 percent loss of sensitive natural community on the Property
   - There is no riparian habitat on the Dana Reserve

3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
   - Not applicable – no wetland present or adjacent to Dana Reserve

4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Threshold:

- Interferes with movement corridor for resident wildlife

5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Thresholds:

- No net loss of sensitive habitat acreage, values, and function (Policy BR1.4)
- Preserve oak woodlands and important biological habitats. (County Code 22.98.070-D)

6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

- Not applicable. No HCP, NCCP or local/regional/state HCP.

4.1.2 CEQA Mandatory Findings

CEQA's Mandatory Findings of Significance guidelines section 15065 for biological resources were considered for this analysis. Thresholds are determined on a case-by-case basis to determine "substantially reduce" for each taxon, and on a yes/no basis for threats to sustainability for fish and wildlife or elimination of a plant or animal community.

Finding of Significance	**Threshold of Significance**
• Substantially reduce the habitat of a fish or wildlife species;	• Definition of substantial determined on a taxon-by-taxon basis, depending on habitat requirements of the listed species.
• Cause a fish or wildlife population to drop below self-sustaining levels;	• Yes
• Threaten to eliminate a plant or animal community; or	• Yes
• Substantially reduce the number or restrict the range of an endangered, rare or threatened species	• Definition of substantial determined on a taxon-by-taxon basis, depending on habitat requirements of the listed species.

4.1.3 Project Impacts and Mitigations Summary

The Project would affect biological resources, including sensitive habitat types, special status plants and animals, and nesting birds. This section provides mitigation recommendations designed to reduce impacts to biological resources onsite as summarized. The first 13 measures provide mitigations relevant to each impacted habitat or sensitive taxon. The last three measures are construction best practices, worker environmental training, and public education, important measures to protect biological resources. Table 11 summarizes impacts and mitigation measures.

TABLE 11. IMPACT AND MITIGATION SUMMARY

Biological Resource	Potential Effect from Proposed Project and Alternative	Recommended Mitigation Measures
Coast live oak forest and woodland oak tree impacts	Reduction of habitat and functions	BIO-1 to 4 (Onsite tree protection, replacement, and woodland habitat protection, plus offsite mitigation for woodland)
Coast live oak woodland (chamise/black sage)	Reduction of habitat and functions	BIO-4 (Offsite mitigation)
Burton Mesa chaparral	Reduction of habitat and functions	BIO-5 (Offsite mitigation)
California perennial grassland, Mediterranean California naturalized perennial grassland, annual brome grassland, and anthropogenic	Not considered biologically sensitive	None
Pismo clarkia	Minor direct and indirect impacts	BIO-6 (Onsite mitigation)
Mesa horkelia, Nipomo Mesa Ceanothus, Sand Mesa Manzanita, Michael's rein orchid	Direct and/or indirect impacts	BIO-7 (On-and offsite mitigation for CRPR 1B taxa)
California spineflower, sand buck brush, and sand almond	Direct reduction of regional population	BIO-8 (On-and offsite mitigation for CRPR 4 taxa)
Blainville's horned lizard	Direct removal, reduction of habitat, degradation of habitat, incidental mortality, invasion by Argentine ants, loss of food resources	BIO-9 (Individual relocation)
Northern California legless lizard [not observed, but potentially present]	Direct removal, reduction of potential habitat, degradation of habitat, incidental mortality	BIO-9 (Habitat protection, and individual relocation)

Biological Resource	Potential Effect from Proposed Project and Alternative	Recommended Mitigation Measures
Sensitive bird potential nesting habitat (Cooper's hawk, sharp-shinned hawk, oak titmouse, white-tailed kite, Nuttall's woodpecker)	Reduction of foraging habitat, loss of nesting habitat, direct removal	BIO-2, BIO-4, BIO-10 (Habitat protection and nest avoidance during construction)
Nesting birds	Direct removal, indirect impacts (noise, lighting, pet depredation)	BIO-2, BIO-3, BIO-10 (Habitat protection and nest avoidance during construction)
Silver-haired bat, hoary bat, and Yuma myotis	Loss of foraging and roosting habitat	BIO-2, BIO-3, BIO-11 (Habitat protection and passive relocation of non-maternal bats)
American badger	Reduction of habitat, degradation of habitat, incidental mortality, direct removal, indirect impacts	BIO-12 (Active den avoidance and relocation outside of natal season)
Habitat connectivity and wildlife movement, common wildlife	Loss of habitat, protective cover, indirect impacts (increased traffic, lighting, noise, vehicle collisions, anthropogenic disturbance)	BIO-13, BIO-14, BIO-15, BIO-16 (Habitat protection, cover excavations, use biodegradable erosion control, provide worker environmental training)

4.2 Habitats

The Project would impact approximately 266.4 acres, including 21.7 acres of coast live oak forest, 75.3 acres of coast live oak woodland, 35.0 acres of Burton Mesa chaparral, 125.0 acres of California perennial grassland, 3.0 acres of annual brome grassland, and 5.1 acres of Mediterranean California naturalized perennial grassland (Table 12, Figure 11) and Figure 12. Approximately 20 acres of coast live oak woodland and forest plus and 0.9-acre of Burton Mesa chaparral would be preserved onsite in a biological open space easement.

TABLE 12. HABITAT IMPACTS FROM PROJECT

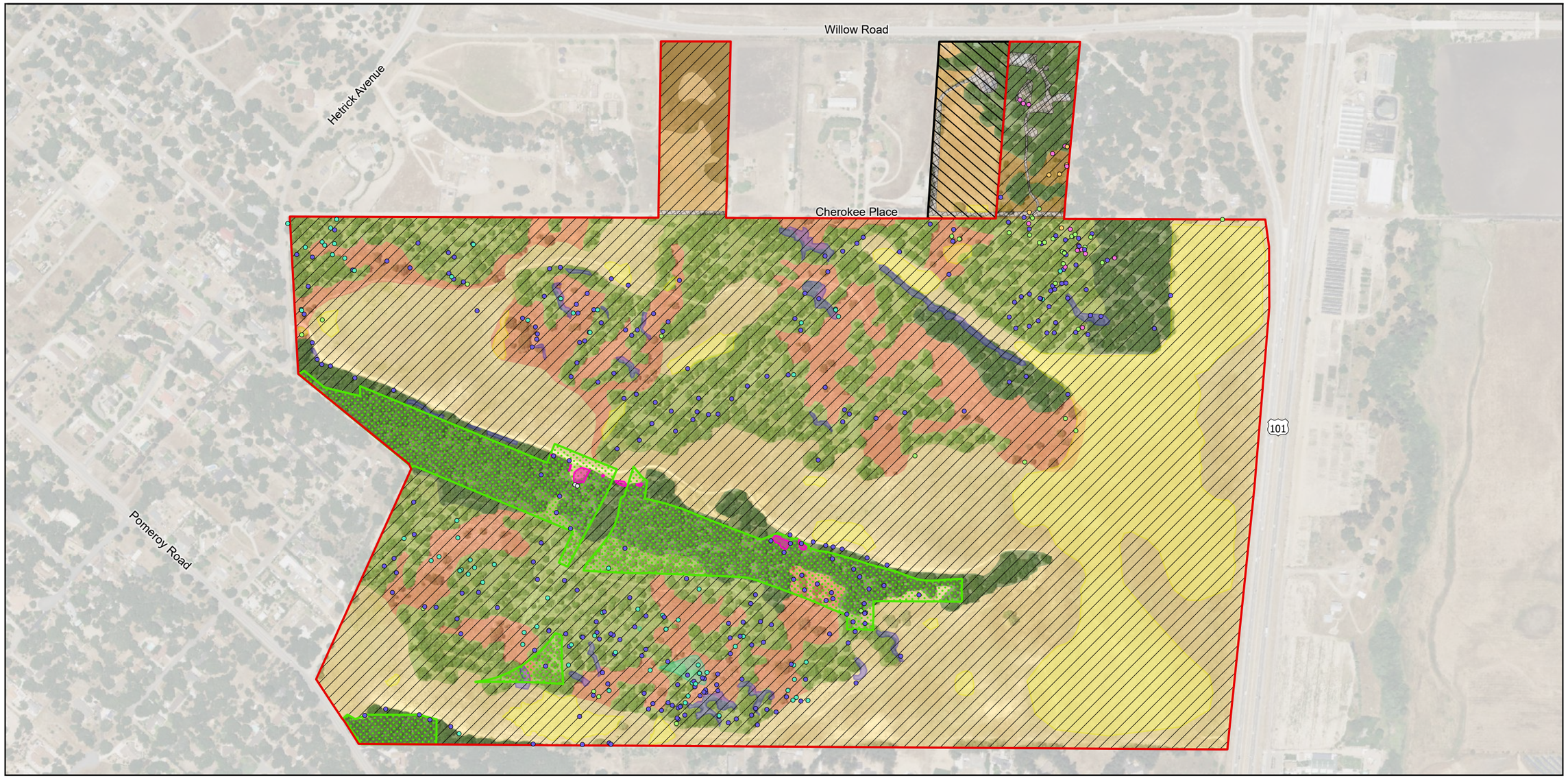
Habitat Type (Global/State Rank)	Impact (Ac.)	Preserved (Ac.)	Total (Ac.)
Coast live oak forest (GNR)	21.65	17.00	38.65
Coast live oak woodland (G3/ S3)	75.33	3.01	78.34
Burton Mesa chaparral (G1/ S1)	35.03	0.94	35.97
California perennial grassland group	125.04	0.99	126.03.03
Mediterranean California naturalized perennial grassland group	5.12	0	5.12
Annual brome grassland alliance	3.03	0	3.03
Anthropogenic	1.23	0	1.23
TOTAL	**266.433**	**21.94**	**288.37**

The Alternative would modify northern access from Willow Road and reduce lot layout impacts. The Alternative would impact 256.4 acres comprised of 15.3 acres of coast live oak forest, 70.0 acres of coast live oak woodland, 34.9 acres of Burton Mesa chaparral, 124.2 acres of California perennial grassland group, 3.6 acres of Mediterranean California naturalized perennial grassland group, and 7.3 acres of annual brome grassland. Approximately 32.0 acres would be preserved onsite in a biological open space easement that includes 20.8 acres of coast live oak forest, 8.3 acres of coast live oak woodland, 1.8 acres of California perennial grassland group, and 1.1 acres of Burton Mesa chaparral (Table 13).

TABLE 13. HABITAT IMPACTS FROM ALTERNATIVE

Habitat Type	Impact (Ac.)	Preserved (Ac.)	Total (Ac.)
Coast live oak forest (GNR)	15.3	20.8	36.1
Coast live oak woodland (G3/ S3)	70.0	8.3	78.3
Burton Mesa chaparral (G1/ S1)	34.9	1.1	36.0
California perennial grassland group	124.2	1.8	126.0
Mediterranean California naturalized perennial grassland group	3.6	0	3.6
Annual brome grassland alliance	7.3	0	7.3
Anthropogenic	1.1	0	1.1
TOTAL	**256.4**	**32.0**	**288.4**

Figure 11. Proposed Plan Impacts - Plants



Legend

- Plan Boundary
- Not Included
- Open Space (Not Impacted)
- Proposed Impacts
- Annual Brome Grasslands
- Anthropogenic
- Burton Mesa Chaparral* - S1
- California Perennial Grassland Group
- Closed Oak Forest
- Mediterranean California Naturalized Perennial Grassland
- Open Oak Woodland* - S3
- California Spineflower
- Mesa Horkelia
- Sand Mesa Manzanita
- Pismo Clarkia
- Mesa horkelia
- Michael's rein orchid
- Nipomo mesa ceanothus
- Sand almond
- Sand buck brush
- Sand mesa manzanita

*Sensitive Natural Communities with State Rank

N

0 250 500 Feet

Dana Reserve
Map Center: 120.50364°W 35.04662°N
Nipomo, San Luis Obispo County

Imagery Source: USDA NAIP, 05/21/2020
Althouse & Meade Inc., 05/19/2020

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October 06, 2021 12:43 PM by SAF

Figure 12. Alternative Plan Impacts - Plants

Legend

- Plan Boundary
- Not Included
- Open Space (Not Impacted)
- Proposed Impacts
- Annual Brome Grasslands
- Anthropogenic
- Burton Mesa Chaparral* - S1
- California Perennial Grassland Group
- Closed Oak Forest
- Mediterranean California Naturalized Perennial Grassland
- Open Oak Woodland* - S3
- California Spineflower
- Mesa Horkelia
- Sand Mesa Manzanita
- Pismo Clarkia
- Mesa horkelia
- Michael's rein orchid
- Nipomo mesa ceanothus
- Sand almond
- Sand buck brush
- Sand mesa manzanita

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Map Updated:
October 06, 2021 12:43 PM by SAF

4.2.1 Oak Habitats and Trees

San Luis Obispo's Land Use Category Standards for the South County Sub-area, Residential Rural (RR), provided for development on the Dana Ranch (aka Dana Reserve). The Proposed Plan would remove 3,943 oak trees and preserve 1,185 oak trees as shown in Figure 13 and Figure 15. The Alternative Plan would remove 3,376 oak trees and preserve 1,552 oak trees as shown in Figure 14 and Figure 16. These counts are based on the 2021 oak tree survey results (Section 3.2.1 Methods).

In the Project approximately 1,073 oak trees removed would be forest habitat, 2,676 would be from woodland habitat, and another 194 scattered among chaparral and grassland habitats. The Alternative would remove approximately 703 oaks from forest habitat and 2,498 trees from oak woodland habitat.

Primary access roads and development areas were aligned and designed to avoid the most intact forest habitat on the Dana Reserve property. Cross-streets, recreational trails, and hazard reduction activities (e.g., wildland fire fuel management) will impact the forest habitat. Up to 750 additional trees may have their Critical Root Zones (CRZ) impacted by construction activities and would need to be assessed by a qualified arborist and impacts mitigated appropriately (BIO-1).

Tables 14 and 15 list the number of oak trees found within seven habitat types: forest, woodland, chaparral, and two grassland types. Most of the trees proposed for removal are in the oak forest and woodland habitats. The remainder occur in chaparral and grassland habitats. Mitigation measures related to oaks preserved are in BIO-1, -2, and -3. Mitigation measures associated with oak removal are in BIO-4.

TABLE 14. PROPOSED PLAN OAK TREE IMPACTS BY HABITATS

Habitat Type	Preserved Trees	Removed Trees	Total Trees	Preserved Canopy (ac)	Impacted Canopy (ac)	Total Canopy (ac)
Coast live oak forest	1,059	1,073	2,132	12.0	15.0	27.0
Coast live oak woodland	116	2,676	2,792	1.1	34.2	35.3
Burton Mesa chaparral	10	155	165	0.2	2.3	2.5
California perennial grassland group	0	16	16	0	0.5	0.5
Mediterranean California naturalized perennial grassland group	0	9	9	0	0.2	0.2
Anthropogenic	0	14	14	0	0.3	0.3
Annual brome grasslands	0	0	0	0	0	0
TOTAL	**1,185**	**3,943**	**5,128**	**13.3**	**52.5**	**65.8**

TABLE 15. ALTERNATIVE PLAN OAK TREE IMPACTS BY HABITATS

Habitat Type	Preserved Trees	Removed Trees	Total Trees	Preserved Canopy (ac)	Impacted Canopy (ac)	Total Canopy (ac)
Coast live oak forest (G5/ S4)	1,248	703	1,951	14.6	10.5	25.1
Coast live oak woodland (G3/ S3)	294	2,498	2,792	3.9	31.6	35.5
Burton Mesa chaparral (G1/ S1)	10	155	165	0.2	2.3	2.5
California perennial grassland group (disturbed)	0	16	16	0	0.5	0.5
Mediterranean California naturalized perennial grassland group	0	0	0	0	0	0
Anthropogenic	0	1	1	0	0.1	0.1
Annual brome grasslands	0	3	3	0	0.1	0.1
TOTAL	**1,552**	**3,376**	**4,928**	**18.7**	**45.1**	**63.8**

4.2.2 Coast live oak forest (Quercus agrifolia / Toxicodendron diversilobum) (G5 /S4)

Approximately 40.5 acres of the 295.3-acre Study Area (14 percent) is coast live oak forest, specifically, the *Quercus agrifolia / Toxicodendron diversilobum* association. Coast live oak forest is identified as a biologically significant resource in San Luis Obispo County that provides important native habitat for plants and wildlife. The Project will result in the permanent loss of up to 21.7 acres in the proposed plan and up to 15.3 acres in the alternative plan of available coast live oak forest habitat. Approximately 17.0 acres (proposed plan) or 20.8 acres (alternative plan) of high-quality habitat will be protected as a biological open space easement.

Coast live oak forest contributes to the Study Area's overall biological diversity and supports eight special status plants (Pismo clarkia, mesa horkelia, Nipomo mesa ceanothus, mesa manzanita, Michael's rein orchid, California spineflower, sand almond, and sand buckbrush), and three special status nesting birds (Cooper's hawk, oak titmouse, white-tailed kite, and Nuttall's woodpecker). Sensitive reptiles such as Blainville's horned lizard are also supported by this habitat. California's Central Coast contains 90 percent of the state's coast live oak forests (Gaman 2008). This habitat type is considered sensitive due to its biological diversity and presence of sensitive plant and animal species; therefore, impacts would be considered significant and mitigation is required to reduce Project impacts.

4.2.3 Coast live oak woodland--Quercus agrifolia / Adenostoma fasciculatum - (Salvia mellifera) (G3/ S3)

Approximately 78.3 acres of the 295.3-acre Study Area (27 percent) is coast live oak woodland, specifically, the *Quercus agrifolia / Adenostoma fasciculatum - (Salvia mellifera)* association,

which is a G3/S3 sensitive community. Coast live oak woodland is identified as a biologically significant resource in San Luis Obispo County that provides important native habitat for plants and wildlife. The Project will result in the permanent loss of up to 75.3 acres in the proposed Project and 70 acres in the Alternative project of available coast live oak woodland habitat. Approximately 3 acres (Project) or 8.4 acres (Alternative) of high-quality habitat will be protected as a biological open space easement.

Coast live oak woodland contributes to the Study Area's overall biological diversity and supports eight special status plants (mesa horkelia, Nipomo mesa ceanothus, mesa manzanita, California spineflower, sand almond, and sand buckbrush), and three special status nesting birds (Cooper's hawk, oak titmouse, white-tailed kite, and Nuttall's woodpecker). Sensitive reptiles such as Blainville's horned lizard are also supported by this habitat. California's Central Coast contains 80 percent of the state's coast live oak woodlands (Gaman 2008). This habitat type is considered sensitive due to its biological diversity and presence of sensitive plant and animal species; therefore, impacts would be considered significant and mitigation is required to reduce Project impacts.

Onsite tree protection and mitigation planting in only intended to mitigate for construction impacts within the critical root zone or to tree canopies during construction. Offsite mitigation for loss of coast live oak forest and woodland habitat is proposed through conservation of oak forest and woodland habitats. Onsite mitigation opportunities are limited; therefore, offsite conservation of oak woodland and chamise chaparral is proposed (Tables 14, 15, and BIO-3, BIO-4, BIO-5).

BIO-1 Prepare Onsite Tree Protection Plan for Trees Retained

Prior to issuance of a grading permit, a qualified arborist shall prepare a Tree Protection Plan designed to protect retained oaks during construction. Tree protection guidelines and a root protection zone shall be established and implemented for each retained tree over 4 inches DBH within 50 feet of site disturbance. The following criteria shall be included:

A. Preserve Oak Forest Habitat on Dana Reserve. Designate oak forest habitat for open space preservation where limited recreational and open space uses may be allowed. Preserve a minimum of 20 acres of oak forest habitat onsite.

B. Map and Number Trees to be Retained. Tree canopies and trunks within 50 feet of proposed disturbance zones shall be mapped and numbered by a city-approved arborist or biologist and a licensed land surveyor. Data for each tree shall include date, species, number of stems, diameter at breast height (DBH) of each stem, CRZ diameter, canopy diameter, tree height, health, habitat notes, and nests observed.

Impacts shall be identified for native oak trees with a diameter at breast height (DBH) of four inches or greater, as measured at a height of 4.5 feet above ground. Impacts include any ground disturbance within the critical root zone, trunk damage, or any pruning of branches three inches in diameter or greater.

A qualified arborist shall determine the critical root zone (CRZ) for each retained tree on a case-by-case basis, generally 1.5 times the average canopy radius (distance from trunk to edge of drip line). For example, a tree with a 24-ft diameter canopy would have a 36-ft CRZ, or approximately 18 feet from the trunk. Where the canopy has been pruned prior to evaluation, the CRZ may be calculated as 1.5 feet per inch of the tree's DBH. For example, an 18-inch DBH tree would be assigned a 24-ft CRZ. The extent of the critical root zone shall be used as

the basis for a Tree Protection Zone (TPZ), such as the line of encroachment for the edge of a group of trees, shown on all construction plans.

C. Pre-Construction Meeting. On-site pre-construction meetings for each phase that affects oak trees shall be attended by the Arborist(s), Owner(s), Planning Staff, and the earth moving team. Explicit exhibits and discussion will focus on tree protection during construction and provisions of the TPP.

D. Install Protective Fencing. Tree protection fencing shall be installed at the perimeter of the TPZ. At a minimum, a tree protection zone (TPZ) shall be delineated as a no-construction zone. Preferably, install fencing six feet outside the TPZ. No construction equipment shall be staged, parked, or stored within six feet of any oak tree dripline.

The fence shall be installed with arborist field consultation before any construction or earth moving begins. The proposed fencing shall be shown on the grading plan. It must be a minimum of 4-ft high chain link, snow or safety fence staked (with t-posts 8 feet on center). The Owner/Applicant shall be responsible for maintaining an erect fence throughout the construction period. (For trees to be protected longer than 4 months, metal fencing is preferred to minimize maintenance requirements.) The arborist(s), upon notification, will inspect the fence placement once it is erected. After this time, fencing shall not be moved without arborist inspection/approval.

If plastic fencing is used, a minimum of four zip ties shall be used on each stake to secure the fence. Weatherproof signs shall be permanently posted on the fences every 50 feet, with the following information: Tree Protection Zone. No personnel, equipment, materials, or vehicles allowed.

E. Avoid and Minimize Tree Impacts. Impacts to the oak canopy or CRZ shall be avoided where feasible in light of project layout and the locations of physical structures, paved or otherwise altered surfaces, and infrastructure. Impacts include pruning branches over three (3) inches in diameter, any ground disturbance or soil compaction within the dripline or CRZ of the tree (whichever distance is greater), and trunk damage.

i. *No Tree Attachments*. Wires, signs and other similar items shall not be attached to the oak trees.

ii. *Pruning*: Pruning shall be implemented by, or under the direction of, a certified arborist. The purpose and type of pruning implemented shall be tracked by service date and class of pruning for each tree. A certified arborist shall direct all pruning. No pruning shall take more than 25 percent of the live crown of any native tree. Any trees that may need pruning for road/home clearance shall be pruned prior to any grading activities to avoid branch tearing. Unless a hazardous or unsafe situation exists, major trimming shall be done only during the summer months. (Coast live oaks, which retain their leaves year-round, are generally dormant July through October.)

Class 1 pruning emphasizes aesthetics, removal of dead, dying, decaying weak branches and selective thinning to lesson wind resistance.

Class 2 pruning is for structural integrity and tree health concerns. It consists of removal of dead, dying, decaying, interfering, obstructing and weak branches as well as selective thinning to lesson wind resistance.

Class 3 pruning is conducted for safety considerations and hazardous conditions.

Class 4 pruning includes crown reduction pruning, such as reduction of tops, sides or individual limbs.

Removal of larger lower branches shall be minimized to: avoid making tree top heavy and more susceptible to "blow-overs,"; reduce large limb cuts that are susceptible to disease and infestation, retain wildlife habitat values associated with the lower branches; retain shade to keep summer temperatures cooler (retains higher soil moisture, greater passive solar potential, provides better conditions for oak seedling volunteers); and retain the natural shape of the tree. The amount of trimming (roots or canopy) done in any one season shall be limited as much as possible to reduce tree stress/shock (10% or less is best, 25% maximum).

iii. *Protect Surface Roots*. Care shall be taken to avoid surface roots within the top 18 inches of soil. If any roots must be removed or exposed, they shall be cleanly cut and not left exposed above the ground surface.

iv. *Utility Placement*: All utilities, sewer and storm drains shall be placed down the roads and driveways and when possible outside of the critical root zones. The arborist shall supervise trenching within the critical root zone. All trenches in these areas shall be exposed by air spade or hand dug with utilities routed under/over roots larger than 3 inches in diameter. Boring under oaks is also acceptable.

v. *Permeable paving within 20 feet of CRZ*. Paving shall be pervious material where access roads or driveways encroach within 20 feet of a retained oak tree's CRZ.

vi. *Trenching Within CRZ*: All trenching within the CRZ of native trees shall be hand dug or implemented with an air spade or bore. All major roots shall be avoided whenever possible. All exposed roots larger than 1 inch in diameter shall be clean cut with sharp pruning tools and not left ragged. A mandatory meeting between the arborists and grading contractor(s) must take place prior to work start.

vii. *Grading Within the Critical Root Zone*: Grading shall not encroach within the CRZ unless authorized by the grading permit. Grading should not disrupt the normal drainage pattern around the trees. Fills should not create a ponding condition and excavations should not leave the tree on a rapidly draining mound. Any exposed roots shall be covered the same day they were exposed if possible. If left exposed for more than a day, roots must be covered with burlap or another suitable material and wetted down two times per day until reburied.

viii. *Equipment Operation*: Vehicles and all heavy equipment shall not be driven under the trees, as this will contribute to soil compaction. Also, there is to be no parking of equipment or personal vehicles in these areas. All areas behind fencing are off limits unless pre-approved by the arborist.

ix. *Existing Surfaces*: The existing ground surface within the critical root zone of all oak trees shall not be cut, filled, compacted or impaired, unless shown on the grading plans and approved by the arborist. If grading in the root zone cannot be avoided, retaining walls shall be constructed to minimize cut and fill impacts.

x. *Construction Materials and Waste*: No liquid or solid construction waste shall be dumped on the ground within the critical root zone of any native tree. The critical root zone areas

are not for storage of materials. No waste or contaminated water shall be dumped on the ground or into any grate between the outer edge of the CRZ and the base of the oak trees, or uphill from any oak tree where such substance might reach the roots through a leaching process.

xi. *No Permanent Irrigation within Dripline of Existing Oaks*: No permanent irrigation shall occur within the dripline of any existing oak tree

F. Correct Damage to Oaks. The Applicant shall be responsible for correcting any damage to oak trees on the property in a manner specified by an arborist approved by the County at the Applicant's expense.

i. *Impacted Root Treatment*: Roots impacted during construction (e.g., trenching or grading operations) shall be treated by the arborist on a case-by-case basis using best practices such as clean cuts accompanied by application of appropriate fungicides and insecticides by a licensed pest control applicator.

ii. *Soil Aeration Methods*: Soils within the CRZ that have been compacted by heavy equipment and/or construction activities must be returned to their original state before all work is completed. Methods include water jetting, adding organic matter, and boring small holes with an auger (18 inches deep, 2 to 3-feet apart with a 2 to 4-inch auger) and the application of moderate amounts of nitrogen fertilizer. The arborist(s) shall advise.

iii. *Chip Mulch*: All impacted areas within the CRZ of the trees shall receive a 4 to 6-inch layer of chip mulch to retain moisture, soil structure and reduce the effects of soil compaction.

iv. *Landscape*: All landscape within the CRZ shall consist of drought tolerant or native varieties. Lawns shall be avoided. All irrigation trenching shall be routed around critical root zones, otherwise above ground drip-irrigation shall be used. It is the owner's responsibility to notify the landscape contractor regarding this mitigation. For this site it is strongly recommended that drought tolerant native landscape is used with the approval of the arborist. This includes all sidewalk/greenbelt areas.

v. *Fertilization and Cultural Practices*: As the project moves toward completion, the arborist(s) may suggest either fertilization and/or mycorrhizal inoculation applications that will benefit tree health. Application of mycorrhizal inoculum offers several benefits to the host plant, including faster growth, improved nutrition, greater drought resistance, and protection from pathogens.

vi. *Post-Construction Tree Inspection*: Prior to occupancy of each phase, a letter from the arborist(s) shall be required that verifies health/condition of all impacted trees and provides recommendations for additional mitigation. The letter shall verify that the arborist(s) or his/her designee were onsite for all grading and/or trenching activity that encroached into the CRZ of the selected native trees, and that all work in these areas was completed to the standards set forth above.

G. Arborist supervision and treatment of impacted trees. A licensed arborist shall supervise all ground disturbances within the TPZ and activities that may impact branches. The arborist shall provide guidance such as temporary damaged root protection, use of air spades, timing between impact and root treatment by arborist, appropriate use of air spade or hand tools to

minimize tree damage specific to the action proposed, and to treat root zone and branch damage.

During construction and upon completion of construction the licensed arborist shall provide treatment, as the licensed arborist determines is appropriate, to maintain and improve the health of the tree, including pruning of the broken main stem, and soil supplement and watering programs. All root pruning shall be completed with sharpened hand pruners. Pruned roots shall be immediately covered with soil or moist fabric. Damaged roots shall be treated within 24 hours by a qualified tree specialist to inhibit fungus, insects, or other disease damage.

H. Report Tree Impacts. Damage to any tree during construction shall be reported to the project arborist within 24 hours. The damage should be treated as soon as possible, as appropriate, by an arborist or his/her designee approved by the County to prevent disease or pest infestation. Damage will be reported to the County and Applicant during each month of construction.

All monitoring will be documented on the field report form which will be forwarded to the project manager and County of San Luis Obispo.

I. Protect Replacement/Mitigation Oaks. The following activities are not allowed within the root zone of newly planted oak trees: year-round irrigation (no summer watering, unless "establishing" new tree or native compatible plants for up to seven years); grading (includes cutting and filling of material); compaction (e.g., regular use of vehicles); placement of impermeable surfaces (e.g., pavement); disturbance of soil that impacts roots (e.g., tilling).

J. Notes on Plans. The standards in BIO-1(A-G) shall be noted and shown on all grading and building plans, as well as an additional map sheet recorded with any Final Map in order to describe the activities prohibited outside the approved construction envelopes. All trees to be retained within 50 feet of impact areas shall be shown with TPZ for groups of trees and CRZ for individual trees.

K. Prepare and Implement Onsite Oak Tree Protection, Replacement, and Habitat Restoration Plan (TPRP). Prior to recordation of a Final Map for a land division on the property, the developer shall submit a Tree Protection Plan, Tree Replacement Plan (BIO-2) and Oak Woodland Habitat Restoration Plan (see BIO-3) for the Director's review and approval. The TPRRP will be approved by the County and provided to al contractors and subcontractors that work within or adjacent to the critical root zone of native trees. Include provisions of the TPRRP in the Worker Training Program to confirm that workers and supervisors are trained in maintaining fencing, protecting root zones and conforming to all tree protection goals. It is highly recommended that each contractor sign and acknowledge this Plan. Any future changes (within the CRZ) will need Project arborist review and implementation of potential mitigation measures before proceeding.

L. Mitigate Impacts to Preserved Trees. Damage that occurs to protected retained trees or sensitive habitats resulting from construction activities shall be mitigated in a manner approved by the Planning and Building Director (Director). Impacts to less than 10 percent of the tree's CRZ and canopy would be mitigated at a 2:1 ratio (plant two trees for each tree impacted). Impacts over 10 percent and less than 50 percent of the tree's CRZ and/or canopy would be mitigated at a 3:1 ratio. Impacts to more than 50 percent of the trees' CRZ would require mitigation at a 4:1 ratio. See BIO-2 for replacement tree performance criteria.

Track mitigation for impacted trees with the following information: Tree tag number, location (latitude/longitude WGS84 datum), number of trunks, DBH of main trunk, proposed CRZ impact percent, proposed mitigation ratio, actual impact percent, date of impact (month/year), document if accounted for in approved plans, actual replacement ratio, actual replacement number, date of planting (month/year), location of mitigation planting (Phase and general location), expected year performance criteria to be met.

Provide quarterly impact and proposed mitigation documentation to the County during active phases of construction. Provide annual reports until project is completed.

BIO-2 Onsite Tree Replacement Plan

Prior to issuance of the Grading Permit, include native oaks in the landscape planting plan for streets and recreational open spaces. Include plants typical of Nipomo Mesa native oak woodlands in open space planting palettes. Include herbs and shrubs that thrive near oaks, and generally require less irrigation than some of the landscaping commonly employed on the Central Coast. Onsite planting shall be at a 4:1 ratio (four trees for each tree removed from grassland habitats; e.g., 120 oaks planted for 30 removed). Oak tree planting benefits native songbirds that rely on oak canopy resources. Table 16 provides appropriate plants associated with oak trees, including species found on the Dana Reserve. This list includes several with California Rare Plant Rank (CRPR) status. We include common native understory species such as western nettle and California plantain as they may be naturally present in native landscapes and allowed to be retained by maintenance crews during restoration and site maintenance. Special status species should be encouraged to be represented in the native plant landscape plan, especially in areas where already present or in the vicinity.

TABLE 16. RECOMMENDED NATIVE PLANT SPECIES FOR LANDSCAPING

Scientific Name	Common Name	Special Status
Shrubs – 12 Native Taxa		
Artemisia californica	California sagebrush	--
Ceanothus impressus var. *nipomensis*	Nipomo mesa ceanothus	CRPR 1B.2
Ceanothus cuneatus var. *fascicularis*	Sand buck brush	CRPR 4.2
Cercocarpus betuloides var. *betuloides*	Birch-leaf mountain-mahogany	--
Frangula californica	California coffee berry	--
Heteromeles arbutifolia	Toyon	--
Prunus ilicifolia	Hollyleaf cherry	--
Prunus fasciculata var. *punctata*	Sand almond	CRPR 4.3
Rhamnus crocea	Spiny redberry	--
Salvia mellifera	Black sage	--
Sambucus nigra ssp. *caerulea*	Blue elderberry	--
Symphoricarpos mollis	Creeping snowberry	--
Forbs – 32 Annual and Perennial Native Taxa		
Acmispon americanus	American bird's foot trefoil	--
Acmispon glaber	Deer weed	--
Anaphalis margaritacea	Pearly everlasting	--

Scientific Name	Common Name	Special Status
Asclepias eriocarpa	Kotolo	--
Cirsium occidentale	Cobweb thistle	--
Clarkia purpurea ssp. *viminea*	Wine cup Clarkia	--
Claytonia parviflora ssp. *parviflora*	Miner's lettuce	--
Corethrogyne filaginifolia	Common tansyaster	--
Dichelostemma capitatum ssp. *capitatum*	Blue dicks	--
Diplacus aurantiacus	Sticky monkeyflower	--
Helianthemum scoparium	Broom rose	--
Hesperocnide tenella	Western nettle	--
Heterotheca grandiflora	Telegraph weed	--
Horkelia cuneata var. *puberula*	Mesa horkelia	CRPR 1B.1
Lupinus bicolor	Miniature lupine	--
Lupinus nanus	Sky lupine	--
Lupinus truncatus	Blunt leaved lupine	--
Paeonia californica	California peony	--
Pedicularis densiflora	Warrior's plume	--
Phacelia ramosissima	Branching phacelia	--
Phacelia tanacetifolia	Lacy phacelia	--
Pholistoma auritum	Fiesta flower	--
Piperia michaelii	Michael's rein orchid	CRPR 4.2
Plantago erecta	California plantain	--
Pseudognaphalium californicum	Ladies' tobacco	--
Pterostegia drymarioides	Fairy mist	--
Silene laciniata	Cardinal catchfly	--
Solanum americanum	Common nightshade	--
Solanum xanti	Chaparral nightshade	--

Performance Criteria for Replacement Trees:

i. Impacted trees shall be replaced at a 2:1, or two 1-inch caliper trees planted for each tree impacted less than 25 percent, or 4:1 ratio for trees impacted more than 50 percent. Mitigation trees must be from Central Coast acorns and may be planted to enhance the onsite oak woodland and/or included in the landscape planting plan.

ii. If locally sourced trees are not available, mitigation trees may be propagated from local acorns or seedlings grown in tree-pots at a 4:1 ratio for trees impacted less than 25% and 6:1 ratio for trees impacted over 50%.

iii. Mitigation trees shall be maintained and monitored for a minimum of 7 years and must have reached a minimum height of 6 feet prior to certification of completion.

iv. When onsite planting areas are not available, off-site oak habitat mitigation area shall be calculated at two times 1750 square feet per tree (assuming a 47 ft diameter average canopy of trees removed from grassland habitats).

BIO-3 Onsite Oak Woodland Habitat Protection and Management Plan

Protect onsite oak woodland resources intended to be retained and preserved on-site (BIO-1 and 2 with performance standards). Prior to issuance of the Grading Permit, the applicant shall submit an Oak Woodland Protection and Restoration Plan to be reviewed and approved by the County Department of Planning and Building. Coast live oak woodland and retained trees within 50 feet of development shall be shown on all grading and development plans. The plan shall be prepared by a qualified individual acceptable to the Director of Planning and Building. The plan shall specify short- and long-term management actions necessary to preserve and enhance the onsite biological open space and will include sections for (1) habitat protection, (2) monitoring during project construction, (3) reporting, (4) oak tree replacement planting, and (5) rare plant mitigation planting and protection, (6) wildlife habitat protection. The plan shall include (7) a fuel management component that provides measures to protect native understory vegetation and downed woody debris in a manner that optimizes wildlife habitat protection and reduces fire risk to neighborhoods.

Fire fuel management shall address reduction of fire fuel loads within 100 feet of structures. The first 30 feet from residences/structures (e.g., the back of yards) shall be maintained to remove dead plant material, and trees maintained to keep branches 10 feet from other trees. In the next 70 feet: cut or graze annual grass to a maximum average height of 4 inches. Create a horizontal space between patches of native shrubs. Remove fallen branches, twigs bark to reduce total fuel load. Retain patches of live shrubs. Mow/graze patches of annual wildflowers after seeds have set. Shape young trees that are in shrub-form to minimize fuel load but allow for trees to protect their trunks during the growth period. Remove heavy branches of mature trees at least 6 feet from the ground per Cal Fires "Prepare for Wildfire" recommendations to maintain defensible space (CAL FIRE 2019). Management of defensible space (100-feet from structures and 10 feet from roads) must protect special status plant and wildlife taxa as specified in BIO-1, 2, and 6 to 12.

BIO-4 Offsite Mitigation Options for Coast Live Oak Forest and Quercus agrifolia / Adenostoma fasciculatum - (Salvia mellifera) Oak Woodland Habitat

Prior to issuance of the Grading Permit, the applicant shall protect *Quercus agrifolia / Adenostoma fasciculatum* - (*Salvia mellifera*) oak woodland at a ratio of 2:1 (two acres conserved for each acre removed). A conservation easement over the protected habitat shall be controlled by a qualified conservation organization approved by the County. Potential conservation organizations include but are not limited to: The Nature Conservancy, San Luis Obispo Land Conservancy, Greenspace, or the Cambria Land Trust.

Applicant Proposed Mitigation: The applicant proposes to conserve 187 acres of coast live oak woodland and 67.5 acres of coast live oak forest that is intermixed with the 95.9 acres of chamise chaparral, 19.2 acres of La Panza manzanita chaparral, and 26.4 acres of annual grassland on the Dana Ridge Ranch. This property is located southeast of the Dana Reserve. Appendix G in this report provides habitat descriptions, a plant list, and figures associated with this offsite mitigation location. The Project proposes to impact 21.7 acres of coast live oak forest and 75.3 acres of coast live oak woodland (97.0 acres total). The applicant proposed mitigation on the Dana Ridge Ranch would yield a mitigation ratio of 3.1:1 for coast live oak forest and 2.5:1 for coast live oak woodland habitats (Table 17).

TABLE 17. COAST LIVE OAK FOREST AND OAK WOODLAND IMPACTS AND PROPOSED MITIGATIONS

Habitat Type (Global/State Rank)	Impact (Ac.)	Mitigation Area (ac)	Approximate Ratio
Coast live oak forest (GNR)	21.7	67.5	3.1:1
Coast live oak woodland (G3/S3)	75.3	187.0	2.5:1

Factors considered in the applicant's mitigation proposal included proximity to the Dana Reserve (South County coast live oak woodlands), and association with chamise chaparral, black sage, and a rare manzanita (*A. pilosula,* La Panza manzanita; CRPR 1B.2) on the mitigation site. The applicant also considered wildlife habitat, and connectivity to wildlife movement corridor(s), opportunities for public access, and general habitat diversity.

4.2.4 Summary of Oak Mitigations

These measures, taken together, are consistent with Public Resources Code section 21083.4 (oak woodlands conservation). Individual oak trees to be retained will be protected onsite (BIO-1). Individual trees removed from grassland will be mitigated onsite as part of the community landscape plan (BIO-2). The removal of approximately 21.7 acres of coast live oak forest and 75.3 acres of coast live oak woodland habitat will be mitigated onsite by conservation of approximately 17 acres of oak forest and 3 acres of oak woodland (BIO-3). Oak forest and woodland habitat loss will be mitigated by conservation of over 238 acres of coast live oak forest and woodland habitat associated with 120 acres of chamise-black sage chaparral and scattered oak habitat. More than half the mitigation for loss of oak woodland habitat will be fulfilled by placement of a conservation easement over at least 320 acres of coast live oak woodland and chamise – black sage chaparral (Table 15 and BIO-5, below).

4.2.5 Burton Mesa chaparral (G1/ S1)

Approximately 36 acres of the 295.3-acre site (12 percent) is degraded Burton Mesa chaparral with less than two percent cover of representative species. This habitat has been subjected to periodic mowing since at least the 1930s and is currently in poor condition, with low cover of constituent species. The proposed development will remove 35 acres (97 percent) and preserve 1 acre (3 percent) of this habitat onsite. The Burton Mesa chaparral regularly integrates with the coast live oak woodland and transitions into California perennial grassland. This diverse habitat supports a unique assemblage of six special status plants including mesa horkelia, sand mesa manzanita, California spineflower, Nipomo mesa ceanothus, sand buck brush, and sand almond. Constituent elements of this habitat currently contribute less than two percent, a relatively small canopy.

The Burton Mesa chaparral alliance has a global/state rank of G1/S1 and is considered critically imperiled. Therefore, loss of almost all (97 percent) Burton Mesa chaparral habitat would be considered significant, and mitigation is necessary to reduce Project impacts. Onsite mitigation opportunities are limited, and a fire regime to sustain diverse characteristic species within maritime chaparral is not practical in a suburban setting; therefore, offsite conservation of Burton Mesa chaparral is proposed (BIO-5).

BIO-5 Offsite Mitigation Options for Burton Mesa Chaparral Habitat

Prior to issuance of the Grading Permit, the applicant shall permanently protect (conserve), enhance (increase suitability of a site as habitat), restore (repair damaged habitat), and/or re-create (revegetate previously lost habitat) Burton Mesa chaparral in maritime coastal California. Re-creation of habitat areas contiguous with protected maritime chaparral shall be prioritized over isolated patches of chaparral mitigation. We recommend a combined approach for habitat mitigation that may include several options: expand contiguous habitat of protected Burton Mesa Chaparral, re-create, restore, and/or enhance contiguous areas of Burton Mesa Chaparral. A conservation easement over protected habitat shall be controlled by a qualified conservation organization approved by the County. Potential conservation organizations include but are not limited to: The Nature Conservancy, San Luis Obispo Land Conservancy, Greenspace, Cambria Land Trust, or the California Department of Fish and Wildlife. The County shall review and approve additional analysis prior to final approval of the proposed off-site conservation area.

A reduced mitigation ratio for re-creation of lost chaparral habitat or restoration of damaged habitat is warranted because the net result would provide significantly higher functional quality habitat than the habitat lost. The re-created Burton Mesa chaparral would be protected in perpetuity and managed for its ecosystem value compared to damaged chaparral on Dana Reserve disturbed periodically for at least 80 years. Restoration of damaged habitat would also substantially improve the functional value of restored habitat compared to the habitat lost. Mitigation as re-creation and/or restoration would increase native Burton Mesa chaparral representative species cover and improve ecosystem function to a more natural state than the current managed grazing land on the Dana Reserve. On Dana Reserve, Burton Mesa shrubs and herbaceous species currently cover approximately 7 acres of land. Re-creation would allow for a no-net-loss of cover by Burton Mesa chaparral constituent elements.

Applicant Proposed Mitigation: The applicant proposes to conserve, enhance, restore, and/or re-create from 8.5 acres to 70 acres of Burton Mesa chaparral at the following mitigation ratios: Conserve currently unprotected Burton Mesa Chaparral habitat in excellent condition at a 1.5:1 ratio. Enhance protected Burton Mesa Chaparral habitat currently in moderate to poor condition at a 2:1 ratio. Restore damaged protected Burton Mesa Chaparral habitat at a 0.5:1 ratio. Re-create high quality Burton Mesa Chaparral at a 0.25:1 ratio in appropriate habitat that has been completely disturbed (e.g., abandoned farmland). For example: Conserve unprotected Burton Mesa chaparral habitat in excellent condition at a 1.5:1 ratio (52 acres); or, enhance protected Burton Mesa chaparral currently in moderate to poor condition at a 2:1 ratio (70 acres); or, restore damaged protected Burton Mesa chaparral habitat at a 0.5:1 ratio (14 acres); or, recreate high quality Burton Mesa chaparral at a 0.25:1 ratio (8.5 acres). A combination of approaches may be applied to reach no-net-loss.

Habitat appropriate for restoration will ideally be located on the Nipomo Mesa with climatic and soil conditions that match those found on Dana Reserve. If appropriate habitat is not available on Nipomo Mesa, the applicant proposes to restore Burton Mesa chaparral within or near the Burton Mesa Ecological Reserve (BMER). Appropriate areas for restoration will either have sand mesa and/or La Purisima manzanita characteristically present or have the appropriate soil and climate conditions to allow restoration that includes one or both species (Appendix H). Appropriate planting palettes will be tailored to the specific restoration area. Characteristics of healthy Burton Mesa chaparral from the surrounding area will be used to determine species proportions (percent cover) as well as performance targets. Constituent elements present on the Dana Reserve

(e.g., mesa horkelia, Nipomo mesa ceanothus, sand buck brush, and sand almond, and California spineflower) will be included in the restoration plan as appropriate (BIO-7 and BIO-8). California perennial grassland group

Approximately 126 acres of the Project or Alternative 288.4 acres (44 percent) contains California perennial grassland. This habitat supports both native and non-native perennial and annual grasses as well as common herbaceous species and scattered shrubs. The Project would result in the loss of all California perennial grassland, including approximately 42.6 acres with a mosaic of California spineflower, a CRPR 4.2 species that occupies this habitat. Individuals and small patches of mesa horkelia, sand mesa manzanita, and sand almond that occur within this habitat will also be impacted.

This habitat type is not considered sensitive and is not ranked globally or statewide. Therefore, loss of California perennial grassland would be considered less than significant. Refer to Section 4.3.2 mitigation recommendations for special status plants.

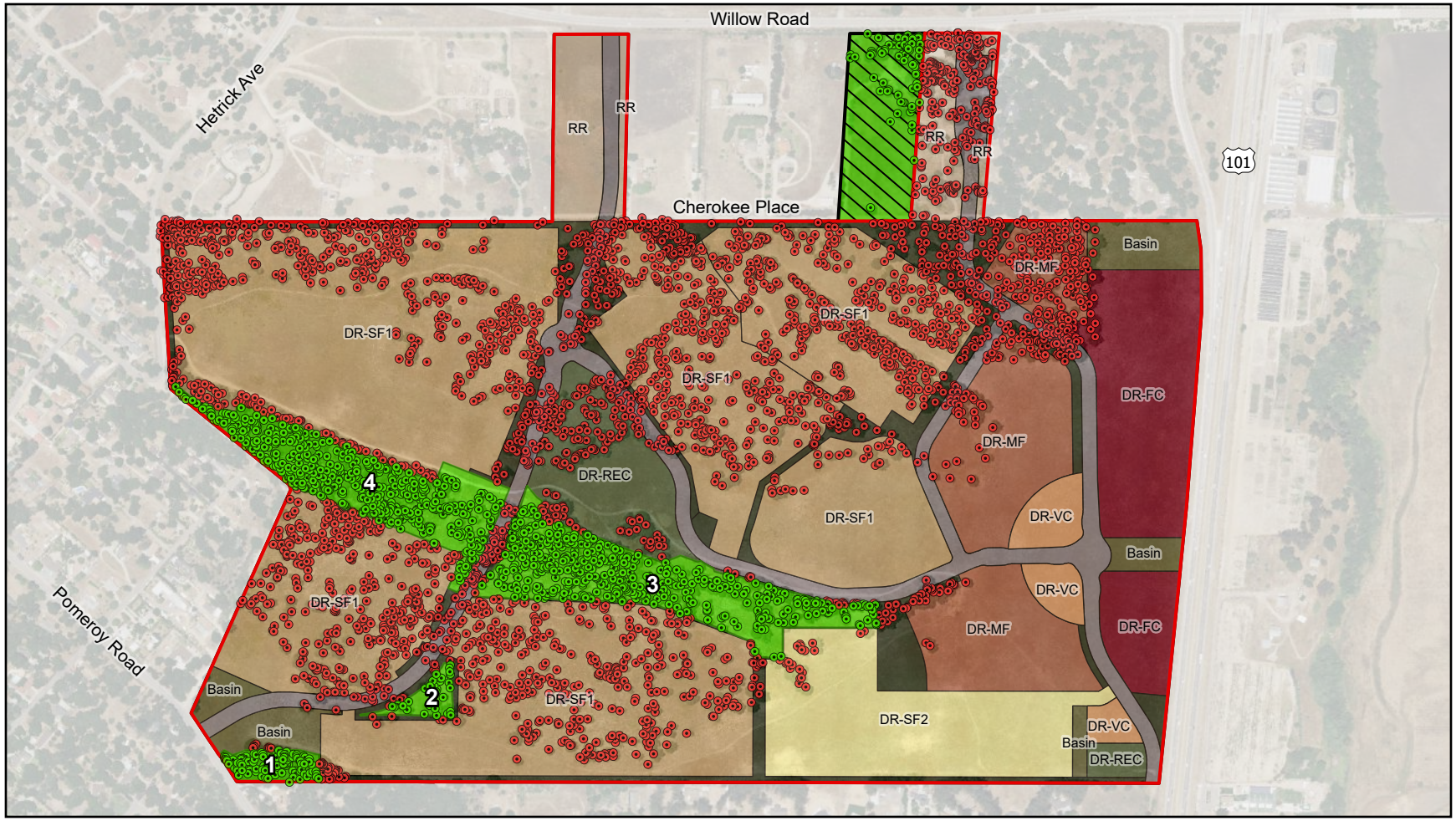
4.2.6 Mediterranean California naturalized perennial grassland group

Approximately 3.6 acres the Project or Alternative 288.4 acres (1 percent) is Mediterranean California naturalized perennial grassland. This habitat is primarily comprised of non-native perennial and annual grasses, and all if it would be removed. This habitat type is not considered sensitive and is not ranked globally or statewide, although it supports special status plants including sand buck brush, Nipomo mesa ceanothus, Mesa horkelia. Mitigation measures for rare plants are provided in Section 4.3.2.

4.2.7 Annual brome grasslands

Approximately 7.3 acres of the 288.4 Project or Alternative (2 percent) is annual brome grassland. The Project would result in the loss of all (100 percent) annual brome grassland encountered within the Study Area. This habitat type is not considered sensitive and is not ranked globally or statewide. Therefore, impacts to annual brome grassland is considered less than significant. No mitigation is recommended for this habitat type.

Figure 13. Proposed Plan Oak Tree Impacts



Legend

- Plan Boundary
- Not Included
- Impacted Oak Tree
- Not Impacted Oak Tree
- Not Impacted Area
- Basin
- Flex Commercial (DR-FC)
- Open Space (DR-OS)
- Primary Roads
- Recreation (DR-REC)
- Residential Multi-Family (DR-MF)
- Residential Single Family - Traditional (DR-SF1)
- Residential Single Family (DR-SF2)
- Rural Residential - Existing (RR)
- Village Commercial (DR-VC)

0 500 1,000 Feet

Dana Reserve
Map Center: 120.50308°W 35.04692°N
Nipomo, San Luis Obispo County

Imagery Source: USDA NAIP, 05/21/2020

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BIOLOGICAL AND ENVIRONMENTAL SERVICES

Map Updated:
October 11, 2021 10:44 AM by SAF

Figure 14. Alternative Plan Oak Tree Impacts

Legend

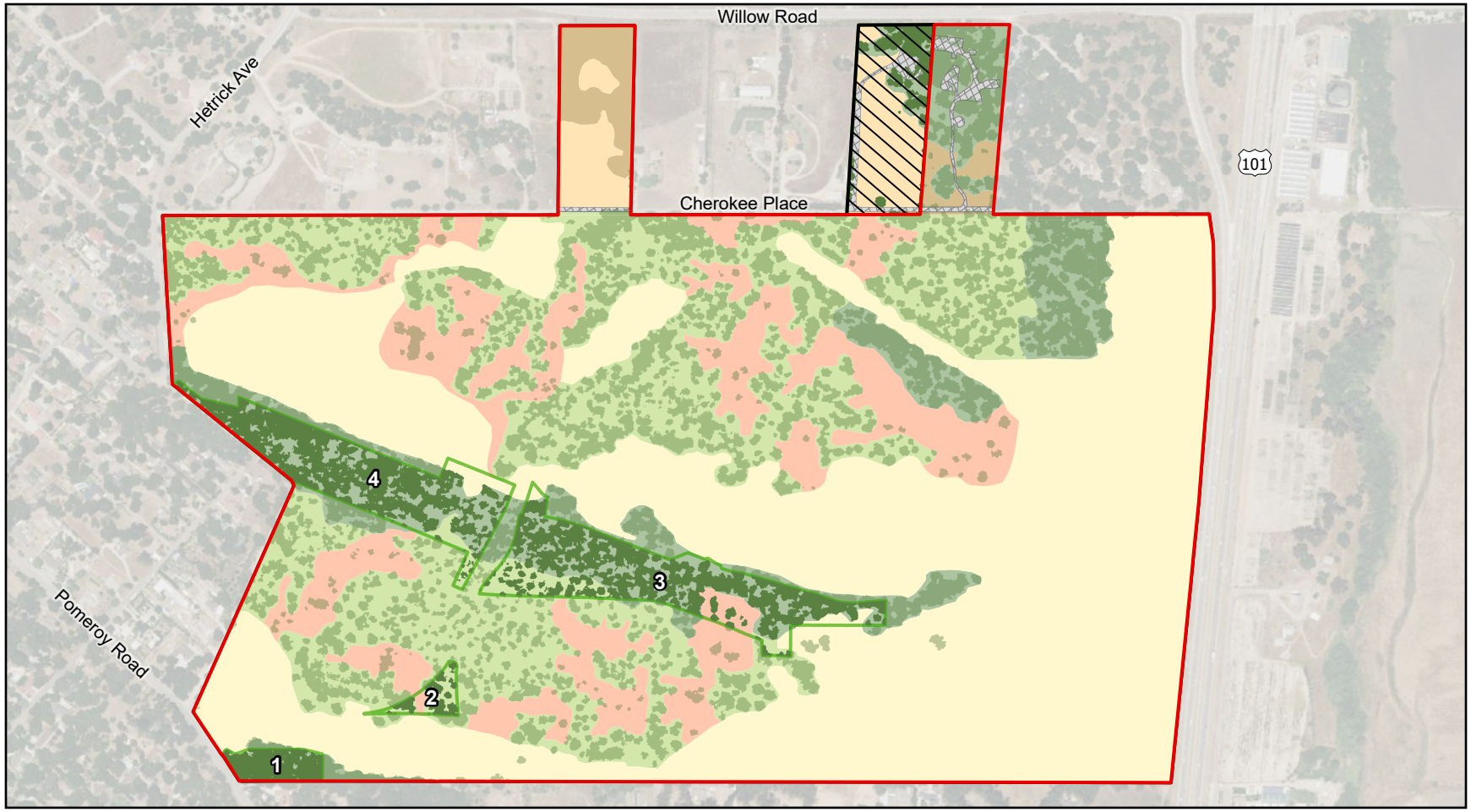
- Plan Boundary
- Not Included
- Impacted Oak Tree
- Not Impacted Oak Tree
- Not Impacted Area
- Basin
- Flex Commercial (DR-FC)
- Open Space (DR-OS)
- Primary Roads
- Recreation (DR-REC)
- Residential Multi-Family (DR-MF)
- Residential Single Family - Traditional (DR-SF1)
- Residential Single Family (DR-SF2)
- Rural Residential - Existing (RR)
- Village Commercial (DR-VC)

0 500 1,000 Feet

Dana Reserve
Map Center: 120.50308°W 35.04692°N
Nipomo, San Luis Obispo County

Imagery Source: USDA NAIP, 05/21/2020

Figure 15. Proposed Plan Oak Tree Canopy in Various Habitats



Legend

- Plan Boundary
- Not Included
- Not Impacted Area
- Not Impacted Oak Canopy
- Annual Brome Grasslands
- Anthropogenic
- Burton Mesa Chaparral* - S1
- California Perennial Grassland Group
- Coast Live Oak Forest
- Mediterranean California Naturalized Perennial Grassland
- Coast Live Oak Woodland* - S3

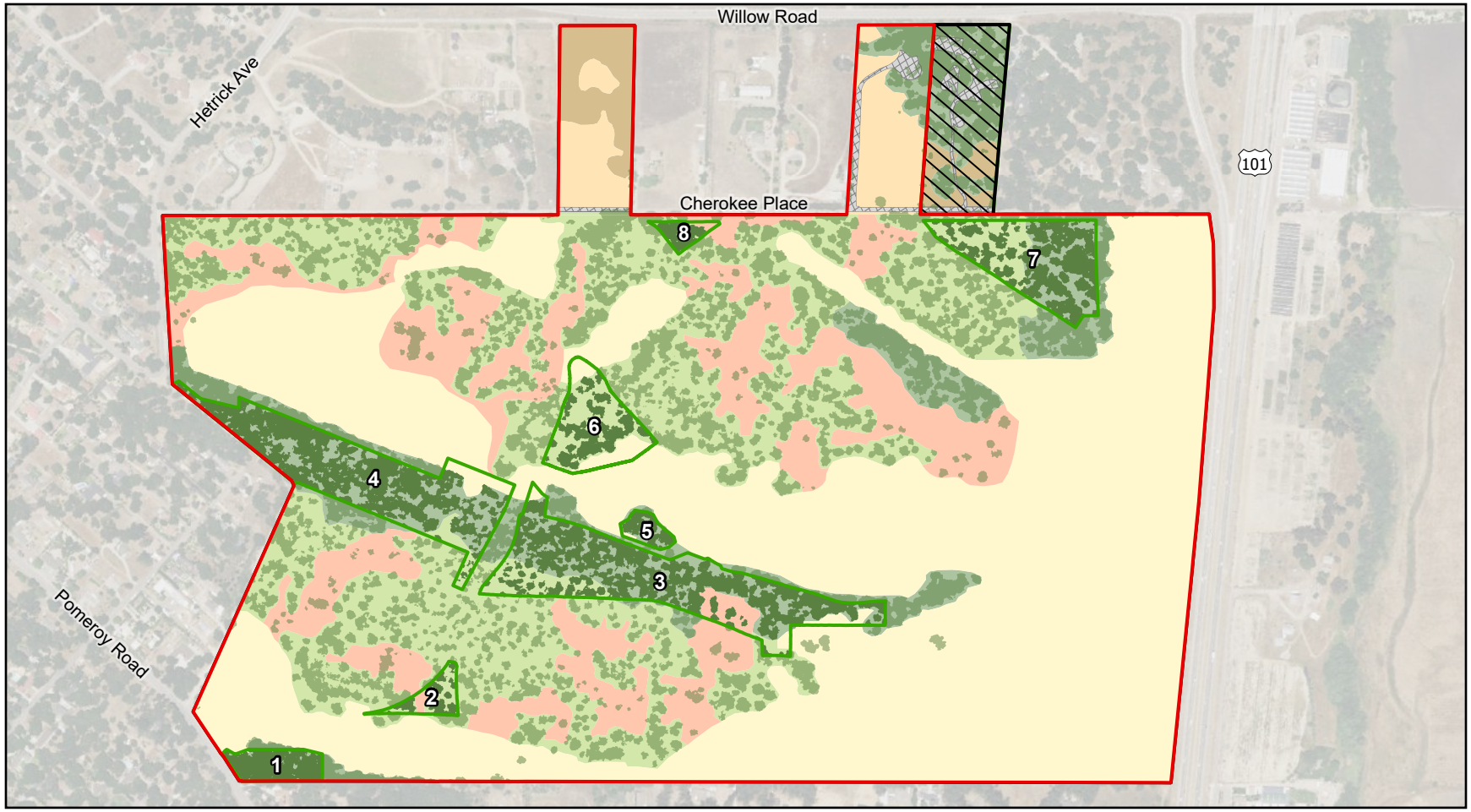
0 500 1,000 Feet

Dana Reserve
Map Center: 120.50308°W 35.04692°N
Nipomo, San Luis Obispo County

*Sensitive Natural Communities with State Rank

Imagery Source: USDA NAIP, 05/21/2020

Figure 16. Alternative Plan Oak Tree Canopy in Various Habitats



Legend

- Plan Boundary
- Not Included
- Not Impacted Area
- Not Impacted Oak Canopy
- Annual Brome Grasslands
- Anthropogenic
- Burton Mesa Chaparral* - S1
- California Perennial Grassland Group
- Coast Live Oak Forest
- Mediterranean California Naturalized Perennial Grassland
- Coast Live Oak Woodland* - S3

N

0 500 1,000 Feet

Dana Reserve
Map Center: 120.50308°W 35.04692°N
Nipomo, San Luis Obispo County

*Sensitive Natural Communities with State Rank

Imagery Source: USDA NAIP, 05/21/2020

4.3 Botanical Resources

4.3.1 Significance Criteria

Botanical field survey results were used to determine potential cumulative environmental effects for the Project on special status plants as required by law (see Sections 1.5 through 1.9). The Conservation and Open Space Element in the County's General Plan states that proposed development avoid significant disturbance to sensitive natural plant communities that contain special-status plants species. When avoidance is not feasible, no net loss is required (Policy BR 2.6, San Luis Obispo County 2010).

All State-listed, CRPR 1, and some CRPR 4 plants may fall under CEQA Guidelines Section 15380 (CNDDB 2021c), which defines Rare, Endangered, and Threatened taxa. Impacts to CRPR 4 plants may warrant consideration under CEQA if cumulative impacts to such plants are significant enough to affect their overall rarity (CDFW 2018). For CRPR 4 plant populations, a significance threshold of direct impacts greater than 10 percent of the population within the Study Area, and effect on the taxon's regional populations were reviewed to assess significance.

4.3.2 Special Status Plants

Eight sensitive taxa observed on the property occur in four of the six habitat types onsite. One Federally Endangered and State Rare plant taxon, Pismo clarkia, was identified during site surveys. Other sensitive plant taxa include two CRPR 1B.1 (Mesa horkelia and Pismo clarkia), two CRPR 1B.2 (sand mesa manzanita, and Nipomo mesa ceanothus), three CRPR 4.2 (Michael's rein orchid, California spineflower, and sand buck brush), and one CRPR 4.3 (sand almond). Impacts to sensitive plant taxa and potential mitigations are summarized in Table 18 and Table 19, discussed separately in the following paragraphs. Discussion begins with Pismo clarkia, a state- and federal-listed taxon, followed by three other plants ranked 1B.1 (seriously threatened in California), and four taxa ranked 4 (limited distribution – watch list) that are moderately threatened in California.

TABLE 18. PROPOSED PLAN IMPACTS TO SENSITIVE PLANT SPECIES

Sensitive Plant Species	Rarity	Impact (approx. count)	Impact acres*	Preserved (approx. count)	Preserved acres	Total (approx. count)	Percent Impact	Proposed Mitigation Ratio**
California spineflower	4.2	varies	42.6	0	0	varies	100%	1:1
Mesa horkelia	1B.1	6907	N/A	556	N/A	7463	93%	2:1
Michael's rein orchid	4.2	0	N/A	7	N/A	7	0%	N/A
Nipomo mesa ceanothus	1B.2	50	N/A	0	N/A	50	100%	2:1
Pismo clarkia	FE/CR - 1B.1	37	0.02	6102	0.2	6139	1%	3:1
Sand almond	4.3	155	N/A	1	N/A	156	99%	1:1
Sand buck brush	4.2	21	N/A	0	N/A	21	100%	1:1
Sand mesa manzanita	1B.2	324	N/A	1	N/A	325	100%	2:1

* Acreage provided for taxa that were mapped using spatial polygons
**Mitigation proposed for impacts to over 10 percent of CRPR 4 population.

Discrepancy in total count between current and alternative plan is due to differing parcels and sensitive species found in each.

TABLE 19. ALTERNATIVE PLAN IMPACTS TO SENSITIVE PLANT SPECIES

Sensitive Plant Species	Rarity	Impact (approx. count)	Impact acres*	Preserved (approx. count)	Preserved acres	Total (approx. count)	Percent Impact	Proposed Mitigation Ratio**
California spineflower	4.2	varies	42.6	75	0	varies	100%	1:1
Mesa horkelia	1B.1	6608	N/A	844	N/A	7452	89%	2:1
Michael's rein orchid	4.2	0	N/A	7	N/A	7	0%	N/A
Nipomo mesa ceanothus	1B.2	8	N/A	25	N/A	33	24%	2:1
Pismo clarkia	FE/CR - 1B.1	37	0.02	6102	0.2	6139	1%	3:1
Sand almond	4.3	127	N/A	22	N/A	149	85%	1:1
Sand buck brush	4.2	2	N/A	2	N/A	4	50%	1:1
Sand mesa manzanita	1B.2	323	N/A	2	N/A	325	99%	2:1

* Acreage provided for taxa that were mapped using spatial polygons
**Mitigation proposed for impacts to over 10 percent of CRPR 4 population.
Discrepancy in total count between current and alternative plan is due to differing parcels and sensitive species found in each.

State-Listed Plants

Pismo clarkia (FE, SR, CRPR 1B.1, G4T1, S1). *Clarkia speciosa* ssp. *speciosa* is a taxon listed as federally endangered, state listed rare, California Rare Plant Rank 1B.1 (seriously threatened in California), with a global rank for the species secure, but the taxon (subspecies) critically imperiled at the global and state rank level. A total of 37 individuals (0.02 acres) counted in May 2020 within Patch 5 will be directly impacted by arterial road 'Collector B' (Figure 11, Figure 12, Figure 17, and Appendix A). No plants were detected in this location during our 2019 investigation, and the road was placed at that location to minimize impacts to Pismo clarkia. The proposed development's open space includes all remaining habitat occupied by Pismo clarkia (0.2 acres, 6,100 individuals). Within the proposed open space, the Pismo clarkia population is located on the northernmost edge of the coast live oak woodland habitat that is proposed for onsite preservation. The immediate adjacency of the remaining population to Project construction and future residential land-use may result in indirect impacts. Potential indirect impacts include an increase of pedestrian use of the area, creation of recreational trails, alteration of hydrology, light availability, dust, disruption of pollinator network, herbicide usage, and non-native plant introduction. This taxon is a Federal and State-Listed plant that is seriously threatened in California. Direct and indirect impacts to Pismo clarkia are considered significant and mitigation is required to reduce Project impacts.

The Project applicant must obtain all necessary approvals and concurrence with CDFW for the take of a State-Listed plant (BIO-7 and BIO-8). Mitigation shall be required to reduce Project impacts through the permanent conservation of habitat occupied by Pismo clarkia and expansion of Pismo clarkia extent to mitigate for direct impacts. Additional onsite avoidance measures for Pismo clarkia include habitat protection, worker training, fencing, biological monitoring, weed

management, and avoidance of mowing/grazing impacts during the annual plant's growing season (February to July).

Although Pismo Clarkia is also federally listed, there is currently no federal nexus for consulting with the USFWS. If the project would impact a federally jurisdictional water, require federal funding, or otherwise require consultation with the USFWS for take of a federally listed wildlife species, a Biological Opinion or Habitat Conservation Plan for take of Pismo Clarkia would likely be required prior to implementation of the project.

No net loss of Pismo Clarkia onsite is proposed unavoidable. Impacts to 0.02 acre of occupied Pismo Clarkia habitat will be mitigated at a 3:1 ratio with onsite restoration and habitat enhancement to expand the extent of Pismo Clarkia present in preserved open space. BIO-6 is consistent with County Policy BR 2.6.2 and BR 2.6.3 (Development Impacts to Listed Species), to use a habitat preservation ratio of a minimum of 2:1 to avoid significant cumulative loss of valuable habitats and obtain easements to protect habitat.

BIO-6 Pismo Clarkia Mitigation

Pismo clarkia patches identified onsite during 2019 and 2020 site surveys shall be protected except for Patch 5 detected in 2020 with 37 individuals. Impacts to Pismo clarkia shall be mitigated by collecting seeds onsite, establishing additional patches of the plant along appropriate boundaries of preserved oak woodland habitat area and by placement of a protective conservation easement over onsite habitats that contain occupied and unoccupied habitat suitable for Pismo Clarkia. Additional surveys shall be conducted in 2021 to determine population size and extent.

Impacts to Pismo Clarkia shall be mitigated at a 3:1 ratio. The population extent and number will equal or exceed 0.26 acre and 6,260 individuals when seasonal climate conditions are similar to 2020 climate conditions. In years less favorable than 2020 (appropriately timed and sufficient rainfall and temperature), the areal extent will remain the approximately the same, but the total population may be less than 6,000 individuals. In more favorable years, the total population may exceed 7000 individuals.

Prior to any ground or vegetation disturbance that would impact Pismo Clarkia (e.g., nearby tree removal or grading), the project applicant shall obtain all necessary approvals from CDFW. Concurrence shall be provided by CDFW that the project would result in take of a State listed species and that an Incidental Take Permit, Conservation Easement, and Habitat Management Plan are required prior to disturbance under Fish and Game Code 2081. A conservation easement over the Pismo Clarkia Habitat will include CDFW as a third-party beneficiary and may also include the County of San Luis Obispo.

Any required mitigation measures shall include, but not be limited to, protection of occupied and unoccupied suitable habitat onsite and seed collection and soil seed bank relocation to expand occupied habitat.

Genetic analysis will be conducted to determine the similarity or difference between the population of Pismo Clarkia on the Dana Reserve with at least two other populations in the Arroyo Grande region. This research and findings will be submitted to a peer reviewed journal and be part of the public record during the mitigation monitoring period.

Figure 17. Impacts - Pismo Clarkia

Legend

- Study Area
- Open Space (Not Impacted)
- Proposed Impacts
- Pismo Clarkia (Clarkia speciosa ssp. immaculata) - FE/SE/1B.1

0 100 200 Feet

Dana Reserve
Map Center: 120.50374°W 35.04443°N
Nipomo, San Luis Obispo County

*Pismo clarkia impacts are identical for both Proposed and Alternative Plans

Imagery Source: Althouse & Meade Inc., 05/19/2020

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Map Updated:
October 06, 2021 12:42 PM by SAF

California Rare Plant Rank 1B

Plant taxa ranked 1B are considered rare, threatened, or endangered in California and elsewhere, although they may not be state- or federal-listed. For consistency with County Policy BR 2.6, CRPR taxa require preservation and/or enhancement of similar habitat at a minimum 2:1 ratio, and habitat placed under a protective easement.

No net loss of Mesa Horkelia, Nipomo Mesa Ceanothus, and Sand Mesa Manzanita, all CRPR 1B taxa, is proposed. Temporal loss of these plants will occur during the mitigation/monitoring period. These three taxa are scattered around and within approximately 150 acres of coast live oak and chaparral habitats in the Study Area of which 129 acres will be permanently impacted.

Mitigation Measure BIO-7 and BIO-8 may include habitat restoration on appropriate conserved property(ies) that includes mitigation for various sensitive plant and animal species on the same parcel (stacked mitigation). For example, a property with suitable habitat for Mesa Horkelia may also provide opportunities to support legless lizards and sand buck brush.

Suitable habitat for mitigation of Burton Mesa chaparral (BIO-5) may also contain sandy habitat suitable for mitigation of constituent plant taxa represented on the Dana Reserve. Mitigation for constituent elements is described below.

Mesa Horkelia (CRPR 1B.1, G4T1, S1). *Horkelia cuneata* var. *puberula* is ranked 1B.1 (seriously threatened) and is endemic to California's central and south coast region. The global rank of the species is secure, but this variety is critically imperiled. CNPS states that "many historical occurrences extirpated; need current information on status of occurrences. Possibly threatened by habitat conversion. Intergrades with other sspp.; populations representing true ssp. *puberula* declining."

Proposed development would directly impact approximately 92 percent of mesa horkelia (approximately 7,000 plants) and preserve the remaining 7 percent located in scattered patches within the 21.9-acre proposed open space easement (approximately 500 plants). In addition, project construction and operation may indirectly impact the remaining 7 percent due to an increase in human use of the open space, alteration of hydrology, light availability, dust, disruption of pollinator network, herbicide usage, and non-native species introduction. Direct and indirect impacts would be considered significant, and mitigation is required to reduce Project impacts.

Nipomo Mesa Ceanothus (CRPR 1B.2, G3T2, S2). *Ceanothus impressus* var. *nipomensis* is ranked 1B.2 (moderately threatened in California) and is endemic to California's central coast. The global rank of the species is vulnerable, but the variety is imperiled. This taxon was added to CRPR 1B.2 in June 2019 (CNDDB 2021a). Proposed development would impact all of the Nipomo mesa ceanothus plants on the Project (approximately 50 individuals). Impacts to Nipomo mesa ceanothus can be mitigated on and/or offsite.

Sand Mesa Manzanita (CRPR 1B.2, G2, S2). *Arctostaphylos rudis* is ranked 1B.2 (moderately threatened in California) and is endemic to California's central coast. The global and state rank of the species is imperiled. CNPS states that this manzanita is "severely reduced on Nipomo Mesa; more widespread on Burton Mesa. Threatened by agriculture, road construction, road maintenance, and oil extraction. Possibly threatened by development."

Proposed development would directly impact all but one sand mesa manzanita on the property (approximately 323 individuals). The single remaining sand mesa manzanita occurs within the proposed open space. Project construction and operation of the Project may result in indirect

impacts to this individual. Indirect impacts may include an increase in human use of the open space, alteration of hydrology, light availability, dust, disruption of pollinator network, herbicide usage, and non-native species introduction. Mitigation for this species can occur off-site.

BIO-7 Mitigation for Plants Ranked 1B (rare or endangered) by CNPS

The mitigation ratio shall be 2:1 for individuals and suitable/occupied habitat for taxa ranked 1B by CNPS. Restore and/or enhance protected habitat suitable for 14,000 mesa horkelia, 100 Nipomo Mesa ceanothus, and 626 sand mesa manzanita. Prior to issuance of the Grading Permit, prepare and begin implementation of a plan to preserve and expand patches of mesa horkelia, Nipomo Mesa ceanothus, and sand mesa manzanita on- and offsite. The plan shall be prepared by a qualified individual acceptable to the Director of Planning and Building. The plan shall conform to CNPS mitigation guidelines (Section 1.8.7). Plan implementation must demonstrate a trajectory toward successful mitigation (i.e., meeting annual performance criteria) prior to occupancy of the last phase. To meet the County's policy of No Net Loss, any enhanced and/or created habitat would need to confirm establishment of individuals and suitable/occupied habitat such that there is no net loss. Maintenance, monitoring and reporting to the County would be required until the enhanced/created habitat has successfully established individuals at the proposed 2:1 ratio.

Measures shall include habitat protection, herbicide avoidance, fencing, and propagation of pollinator plants appropriate to support native bees associated with pollination of these plants. The applicant may fund Public Benefit restoration efforts on conserved land to be implemented and monitored by organizations such as: The Nature Conservancy, San Luis Obispo Land Conservancy, Greenspace, or the Cambria Land Trust. The fee would be used to pay for mitigation planting, maintenance, and long-term monitoring in perpetuity.

Measures to protect and expand mesa horkelia within protected oak woodland shall be incorporated in BIO-3 Onsite Oak Woodland Habitat Protection and Management Plan.

California Rare Plant Rank 4

Plant taxa ranked 4 are on a "watch list" as they have limited distribution. Plants ranked as 4.2 are moderately threatened in California and 4.3 are not very threatened. While CNPS cannot call these plants "rare" from a statewide perspective, they are uncommon enough that their status should be monitored regularly.

Should the degree of endangerment or rarity of a List 4 plant change, the Society will transfer it to a more appropriate list. Very few of the plants constituting List 4 meet the definitions of Sec. 1901, Chapter 10 (NPPA) or Secs. 2062 and 2067 (CESA) of the California Department of Fish and Game Code, and few, if any, are eligible for state listing. Nevertheless, many of them are significant locally, and CNPS recommends that List 4 plants be evaluated for consideration during preparation of environmental documents relating to CEQA. This may be particularly appropriate for the type locality of a List 4 plant, for populations at the periphery of a species' range, or in areas where the taxon is especially uncommon or has sustained heavy losses, or for populations exhibiting unusual morphology or occurring on unusual substrates.

For consistency with County Policy BR 2.6, compensation for significant impacts to List 4 plants requires offsite habitat occupied by the affected taxon and/or habitat that may be restored, preserved and managed in perpetuity at a minimum 1:1 mitigation ratio (at least one plant preserved for each plant affected, and also at least one occupied acre preserved for each occupied

acre affected) up to the significance threshold. The threshold for plants ranked List 4 is 10 percent of the Study Area. When over 10 percent of the onsite population is impacted, a mitigation and monitoring program will be required.

California Spineflower (CRPR 4.2, G3, S3) *Mucronea californica* is ranked 4.2 which is considered to have a limited distribution and is vulnerable to habitat loss. The species' global and state rank is "vulnerable". CNPS states, "Rare in southern California. Many herbarium records old. Threatened by aggregate mining, vehicles, flood control modification, urbanization, and water percolation projects. Possibly threatened by non-native plants. Includes *Chorizanthe californica* var. *suskdorfii*."

Proposed development would permanently impact all California spineflower occurrences on the property (42.6 acres; approximately 807,500 individuals). Impacts to 100 percent of California spineflower onsite exceed the 10 percent threshold described in Section 4.2.1 and would potentially compromise a large portion of the known regional population.

Due to the lack of information about the cultural requirements to successfully propagate this annual plant at a large scale, this impact may not be mitigable.

Sand Buck Brush (CRPR 4.2, G5, T4, S4) *Ceanothus cuneatus* var. *fascicularis* is ranked 4.2, a taxon with limited distribution known only from San Luis Obispo and Santa Barbara Counties. The species' global and state rank is "apparently secure". CNPS states that it is threatened by non-native plants. The proposed development could permanently impact all known sand buck brush plants on the property (20 individuals). Impacts to 100 percent of sand buck brush exceed the 10 percent threshold.

Sand buck brush can be propagated and integrated into the landscape planting plan associated with coast live oak planting onsite.

Sand Almond (CRPR 4.3, G5, T4, S4) *Prunus fasciculata* var. *punctata* is ranked 4.3 which is considered to have a limited distribution known only from San Luis Obispo and Santa Barbara Counties. It is not very threatened in California. Proposed development could permanently impact all sand almond occurrences on the property (141 individuals). Impacts to 100 percent of sand almond exceed the 10 percent threshold.

Sand almond propagation is very difficult per Dave Fross (personal communication October 9, 2019). A concerted effort can be made toward propagation and cultivation of this taxon within appropriate conserved habitat.

Michael's Rein Orchid (CRPR 4.2, G3, S3) *Piperia michaelii* is ranked 4.2, a taxon with limited distribution and moderately threatened in California. The proposed development's open space includes the locations of all Michael's rein orchid plants observed in the Study Area (7 individuals). No direct impacts to this species are proposed in the Project design. All individuals of Michael's rein orchid are located directly south of Pismo Clarkia Patch 3 and within a few feet north of a side road/trail that stems west from Project component 'Collector B' (Figure 11, Figure 12 and Appendix A). Impacts to this taxon are avoidable and plants may be preserved onsite.

Other special status plant species. A total of 10 additional sensitive plant taxa were determined to have potential to occur in the Study Area. Surveys conducted during appropriate bloom times yielded negative results. Therefore, no impacts are proposed, and no species-specific mitigation measures are recommended.

BIO-8 Mitigation for Plants Ranked 4 (limited distribution – watch list) by CNPS

A. Restore and/or enhance 45 acres of conserved sandy habitat suitable for California spineflower, sand buckbrush, and sand almond to mitigate for impacts at a 1:1 ratio above the 10 percent impact threshold. Prior to issuance of the Grading Permit, prepare a plan to conserve and/or restore off-site habitat for California spineflower, sand buck brush, and sand almond. The Plan shall be prepared by a qualified individual acceptable to the Director of Planning and Building and approved prior to implementation. The plan shall include purchase for conservation of land containing impacted species and/or restoration of approximately 40 acres of grassland habitat with high microsite suitability for California spineflower, sand buck brush, and sand almond. Plan shall conform to CNPS guidelines for mitigation (Section 1.8.7). The applicant may fund Public Benefit restoration efforts on conserved land to be implemented and monitored by organizations such as: The Nature Conservancy, San Luis Obispo Land Conservancy, Greenspace, or the Cambria Land Trust. The funds would be used to pay for mitigation planting, maintenance, and long-term monitoring in perpetuity.

Sand buckbrush and sand almond shall be planted at a ratio over 1:1 to achieve a no-net loss after 5 years. California spineflower shall be seeded in grassland habitat managed by mowing or grazing in a manner than supports spineflower reproduction in normal rainfall years. Plant material shall be derived from sources on the Nipomo Mesa.

Habitat protection and long-term maintenance shall be funded by an endowment sufficient to monitor and maintain habitat appropriate for needed to attempt re-establishment or expansion of California spineflower on the restoration site.

B. Measures to avoid and protect Michael's rein orchid in onsite oak woodland proposed for protection shall be incorporated into BIO-3. Since all observed individuals of Michael's rein orchid are located directly south of Pismo clarkia Patch 3, this species shall incidentally benefit from being included in BIO-6. Construction workers and biological monitors shall also be made aware of and instructed to avoid this orchid during monitoring for Pismo Clarkia (BIO-6 and BIO-15).

4.3.3 Summary of Special Status Plant Mitigations

Mitigation Measures BIO-1 to BIO-8 will be implemented to achieve "no net loss of sensitive natural communities and critical habitat areas," Consistent with Policy BR 2.6 of the San Luis Obispo General Plan. Preservation of over 21 acres of coast live oak woodland, chamise-black sage chaparral, and California perennial grassland will protect habitat for over 6,000 Pismo clarkia, 500+ Mesa horkelia, 1 sand mesa manzanita, and 7 Michael's rein orchid. Pismo clarkia (federally listed Endangered and state listed Rare) will be seeded in unoccupied suitable habitat onsite to expand areal extent at a 3:1 ratio onsite to mitigate for plants detected in 2020, but not 2019 that would be impacted by an arterial road. The patches of Pismo Clarkia identified in 2019 and 2020 plus additional 0.06-acre suitable habitat will be protected by placement of a conservation easement with endowment for maintenance and monitoring in perpetuity.

To mitigate at a 2:1 ratio for other plants ranked CRPR 1B, off-site protected habitat will be restored and revegetated to achieve a no-net loss of individuals and suitable/occupied habitat. Off-site restoration and conservation are proposed for Burton Mesa Chaparral (Section 4.2.5) that will contain sand mesa manzanita, Nipomo Mesa ceanothus, sand buck brush, sand almond, and mesa horkelia, and may also support California spineflower a CRPR list 4 taxon. Sand buckbrush and

sand almond (List 4 taxa) mitigation can be achieved by restoration and protection of suitable/occupied habitat at a 1:1 ratio on- and off-site. Achieving a 1:1 performance standard for California spineflower (List 4) may be difficult due to large annual population fluctuations that depend on climate conditions and disturbance levels. For mitigation of this species, a 1:1 ratio of suitable habitat that contains scattered California spineflower at a baseline population of several thousand individuals can be protected and managed with an appropriately timed grazing/mowing regime.

Additional off-site conservation is proposed for over 320 acres of Coast Live Oak Forest, Coast Live Oak Woodland, and Chamise-Black Sage Chaparral, greater than 50 acres of which contains rare La Panza manzanita.

4.4 Wildlife Resources

Nine special status animal species were detected in the Study Area during biological surveys. Nesting and special status birds (Cooper's hawk, oak titmouse, White-tailed kite, and Nuttall's woodpecker) were detected throughout coast live oak woodland during site surveys. Blainville's horned lizard was detected in open canopy coast live oak woodland. American badger dens were found in grassland habitat onsite. Four of seven bat species observed onsite are CDFW species of special concern or Special Animals (pallid bat, silver-haired bat, hoary bat, and Yuma myotis). The Project is likely to adversely affect special status species discussed by taxonomic group (invertebrates, reptiles, birds, mammals) in Sections 4.3.1 to 4.3.5. Construction best practices to protect wildlife are included in Section 4.4. Figure 18 and Figure 19 show locations of impacts to wildlife resources from the Project and the Alternative.

Figure 18. Proposed Plan Impacts - Animals

Legend

- Plan Boundary
- Not Included
- Open Space (Not Impacted)
- Proposed Impacts
- Annual Brome Grasslands
- Anthropogenic
- Burton Mesa Chaparral* - S1
- California Perennial Grassland Group
- Closed Oak Forest
- Mediterranean California Naturalized Perennial Grassland
- Open Oak Woodland* - S3
- Badger Den
- Blainville's Horned Lizard
- Woodrat Midden

Nests

- Acorn Woodpecker
- American Crow
- Blue-Gray Gnatcatcher
- Dark-eyed Junco
- Great Horned Owl
- House Finch
- Nest Cavity
- Raptor Nest
- Red-Tailed Hawk
- Stick Nest

*Sensitive Natural Communities with State Rank

0 250 500 Feet

Dana Reserve
Map Center: 120.50364°W 35.04662°N
Nipomo, San Luis Obispo County

Imagery Sources: USDA NAIP, 05/21/2020
Althouse & Meade Inc., 05/19/2020

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Map Updated:
October 06, 2021 12:42 PM by SAF

Figure 19. Alternative Plan Impacts - Animals

Legend

- Plan Boundary
- Not Included
- Open Space (Not Impacted)
- Proposed Impacts
- Annual Brome Grasslands
- Anthropogenic
- Burton Mesa Chaparral* - S1
- California Perennial Grassland Group
- Closed Oak Forest
- Mediterranean California Naturalized Perennial Grassland
- Open Oak Woodland* - S3
- Badger Den
- Blainville's Horned Lizard
- Woodrat Midden

Nests

- Acorn Woodpecker
- American Crow
- Blue-Gray Gnatcatcher
- Dark-eyed Junco
- Great Horned Owl
- House Finch
- Nest Cavity
- Raptor Nest
- Red-Tailed Hawk
- Stick Nest

*Sensitive Natural Communities with State Rank

0 250 500 Feet

Dana Reserve
Map Center: 120.50364°W 35.04662°N
Nipomo, San Luis Obispo County

Imagery Sources: USDA NAIP, 05/21/2020
Althouse & Meade Inc., 05/19/2020

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BIOLOGICAL AND ENVIRONMENTAL SERVICES

Map Updated:
October 06, 2021 12:41 PM by SAF

4.4.1 Special Status Invertebrates

A special status invertebrate survey verified species absence for the obscure bumble bee and western bumble bee. Therefore, this Project would not impact these species. No mitigation measures are recommended.

4.4.2 Special Status Reptiles

Blainville's (coast) horned lizard (SSC)

Appropriate habitat was identified on the property and two Blainville's horned lizards were observed during May 2018 and spring 2020 surveys on the edge of Coast Live Oak Woodland habitat. Loss of over 88 percent of suitable habitat would adversely affect this species. In addition, Project activities such as grading and other excavation work would potentially result in direct impacts, habitat loss, and mortality. Indirect impacts related to development and resulting occupancy include pet depredation and introduction of invasive Argentine ants that outcompete native ants, the main food resource for Blainville's horned lizard. Direct and indirect impacts to Blainville's horned lizard would be significant. To reduce direct impacts to Blainville's horned lizard, mitigation measures BIO-9 and BIO-15 are recommended.

Northern California legless lizard (SSC)

The Northern California legless lizard likely occurs in the Project area's sandy soils, particularly in oak woodland habitat. Although surveys during 2020 did not detect legless lizards, their population number may be low. Project activities such as grading and other excavation could result in direct impacts, loss of habitat, and mortality. Direct and indirect impacts to Northern California legless lizard would be significant. To reduce potential impacts to Northern California legless lizards, mitigation measure BIO-4, which protects offsite woodland habitat; BIO-9, which implements an approved relocation plan during construction; and BIO-15, which mandates worker training, are recommended

BIO-9 Special Status Reptiles Protection and Relocation

Prior to issuance of a grading permit, the project applicant shall develop a Special Status Reptile Relocation Plan (Plan) for silvery legless lizard and coast horned lizard. The goal of the relocation plan is to establish guidelines and protocols for relocating special status reptiles out of harm's way. The Plan shall include an overview of prior surveys for the species, figures of known and potential habitat areas, timing of relocation efforts, and details regarding capture and relocation methods. Additionally, the Plan shall identify and characterize suitable onsite relocation sites for each species. The following details shall be specifically incorporated and expanded upon in the Plan:

- Relocation surveys for special status reptiles should be conducted during appropriate times of year when the species are active and can be located. Subject to expert refinement in the Plan, legless lizard coverboard and raking surveys should be conducted between January and July. Because legless lizards are not expected to move back into work areas after relocation, these surveys can be done well in advance of earthwork. Horned lizard surveys should be conducted on warm days from April through August, immediately prior to commencement of earthwork. The Plan shall require a minimum of three surveys conducted during the time of year/day when each species is most likely to be observed.

- Relocation surveys for legless lizards shall utilize a combination of cover boards and soil raking to find lizards in suitable habitat areas prior to commencement of earthwork activities. Relocation surveys for horned lizards shall be completed by pedestrian transects on warm days utilizing narrow spacing to visually search for lizards on the surface of the soil. Special status reptiles would be captured by hand, stored in suitable wildlife relocation bins, and immediately relocated to approved habitat.
- The Plan shall identify suitable legless lizard relocation habitat as any sandy soil area with suitable leaf litter under shrub or oak tree canopy. For horned lizard, suitable relocation habitat shall be identified as that which has friable soils, a detectable prey source, and sandy barrens for burrowing and basking.
- The Special Status Reptile Relocation Plan shall be submitted to the County of San Luis Obispo and CDFW for approval no less than 60 days prior to any ground disturbing activities within potentially occupied habitat.
- A qualified biologist shall be present during ground-disturbing activities immediately adjacent to or within habitat that supports special status reptiles.
- Clearance surveys for special status reptiles shall be conducted by a qualified biologist prior to the initiation of ground disturbing construction each day, especially along the interface between open space and construction areas.
- Results of the surveys and relocation efforts shall be provided to the County of San Luis Obispo and CDFW in the annual mitigation status report. Collection and relocation of animals shall only occur with the necessary scientific collection and handling permits.

4.4.3 Special Status Birds

Special status birds and raptors such as Cooper's hawk, oak titmouse, and Nuttall's woodpecker may be adversely affected by the loss of nesting and foraging habitat in oak and chaparral habitats. Loss of grassland habitat could adversely affect foraging raptors and ground nesting birds. Incremental habitat loss on a regional scale may adversely affect special status birds. These impacts would require mitigation as recommended to protect habitat offsite, see measuresBIO-4, BIO-5, and BIO-10.

4.4.4 Nesting Birds

The proposed development will affect common and special status nesting birds by removing coast live oak woodland, perennial grassland, and chamise-black sage chaparral. Loss of coast live oak woodland particularly affects cavity nesting species, such as woodpeckers, wrens, northern flicker, and oak titmouse, as well as canopy nesting species, such as raptors and Hutton's vireo, and California scrub-jay, chestnut-backed chickadee, western bluebird, and tree swallow. Two USFWS birds of conservation concern (BCC) identified in the Study Area could be adversely affected from oak woodland removal: Nuttall's woodpecker and oak titmouse. The potential for habitat removal to adversely affect nesting birds can be reduced.

Migratory non-game native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section 10.13) (USFWS 2006). Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take (as defined therein) of all native birds and their active nests, including raptors and other migratory non-game birds (as

listed under the Federal MBTA). The following recommendations are intended to reduce potential impacts to nesting birds to a less than significant level.

BIO-10 Nesting Bird Preconstruction Survey and Nest Avoidance

Within one week prior to ground disturbance activities, if work occurs between February 1 and August 31, nesting bird surveys shall be conducted. If surveys do not locate nesting birds, construction activities may begin. If nesting birds are located, no construction activities shall occur within 100 feet of nests or within 500 feet of raptors until chicks have fledged. The Project biologist may recommend a buffer decrease depending upon site conditions (such as line-of-sight to the nest) and the birds' level of tolerance for construction activities. The biologist shall collect data on the birds' baseline behavior and their tolerance to disturbance by observing the birds at the nest prior to construction activities. If the birds are incubating, record how long they stay on the nest. If nestlings are present, record how frequently adults deliver food and visit the nest. Biologist shall also record the birds' reaction to the biologist and how close the biologist can get to the nest before the birds' behavior is altered or they show signs of stress or disturbance. Biologist shall set the reduced buffer distance based on these data. Nesting bird buffers may be reduced up to 50 feet, while raptor nest buffers may be reduced up to 250 feet. If nest buffers are reduced, the biologist will monitor any construction activities that take place within 100 feet of nesting birds and 500 feet of raptor nests. If nesting birds show any signs of disturbance, including changes in behavior, significantly reducing frequency of nests visits, or refusal to visit the nest, the biologist will stop work and increase the nest buffer.

4.4.5 Special Status Mammals

Loss of approximately 93 percent of available habitat on the property will adversely affect American badger, woodrat, sensitive bat species, and numerous common species such as coyote, black-tailed jackrabbit, and California ground squirrel through loss of available denning/roosting sites, reduction in prey base, loss of protective cover, predation by domestic animals (dogs and cats), increased vehicle traffic, and increased night light and noise. Direct impacts may be reduced with mitigation.

Bats

Four CDFW-designated SSC/Special Animals, pallid bat, silver-haired bat, hoary bat, and Yuma myotis, and two common species, California myotis and Mexican free-tailed bats, occur in the Study Area. These bats are known to roost in buildings, caves, rock outcrops, tree hollows, tree cavities, and tree canopies. There are a few structures with appropriate day roosting habitat on the northeast 7-acre parcel of the Study Area and suitable trees and snags with cavities are present. Significant impacts to special status bats and maternal bat colonies can be avoided.

Roosting bats and/or maternal bat colonies may be present in trees and snags with appropriate cavities or loose bark. The breeding season for bats is April to October. Project activities including building/structure demolition, tree removal, grading and other excavation work could result in take of bat species or disturbance of bat roosts. To reduce potential impact on bats, we recommend the following measure:

BIO-11 Bat Pre-Construction Survey and Passive Relocation

Within 30 days of construction between April and September, inspect structures, and trees or snags to be removed or pruned that are greater than 20 inches diameter-at-breast-height, for bats. If a bat roost is found, the qualified biologist shall implement passive relocation measures such as installation of one-way valves. Bat maternity colonies may not be disturbed.

American Badger (SSC)

American badger occurs in the Study Area. Project activities including grading and other excavation work could result in impacts to American badger adults or young, or disturbance of natal dens and abandonment by adult badgers. During the winter badgers do not truly hibernate, but are inactive and asleep in their dens for several days at a time. Because they can be torpid during the winter, they are vulnerable to disturbances that may collapse their dens before they rouse and emerge. Therefore, surveys shall be conducted for badger dens throughout the year. To reduce potential impact to badgers, we recommend the following measures:

BIO-12 Badger Den Pre-Construction Survey and Relocation

Conduct pre-construction survey within thirty days of beginning work on the site to identify if badgers are using proposed work areas. Send results to the County of San Luis Obispo with monthly construction update reports.

If suitable American badger dens are identified within the disturbance footprint, monitor den opening with tracking medium or an infrared camera for three consecutive nights to determine current use. If the den is not in use, excavate and collapse the den to ensure that no animals are present during construction. If the den is occupied during the non-maternity period and avoidance is not feasible, badgers may be relocated by first incrementally blocking the den over a three -day period, followed by slowly excavating the den (either by hand or with mechanized equipment under the direct supervision of a qualified biologist, removing no more than 4 inches at a time) before or after the rearing season (15 February through 30 June). Passive relocation of American badgers is conducted under the direction of a qualified biologist.

If the pre-construction survey finds potential badger dens, they shall be inspected by the Project Biologist to determine whether they are occupied. If a potential badger den is too long to completely inspect from the entrance, a fiber optic scope may be used to examine the den to the end. Inactive dens may be excavated by hand with a shovel to prevent re-use of dens during construction. If badgers occupy active dens in proposed work areas between February and July, nursing young may be present.

To avoid disturbance and the possibility of direct impacts to adults and nursing young, and to prevent badgers from becoming trapped in burrows during construction activity, American badger dens determined to be occupied during the breeding season (15 February through 30 June) shall be flagged. Between February and July, no grading or ground disturbing activities shall occur within 100 feet of active badger dens to protect adults and nursing young. Buffers may be modified by the qualified biologist, provided the badgers are protected, and buffers only removed after the qualified biologist determines that the den is no longer in use.

If a potential den is located outside of the disturbance footprint but within 500 feet of ground disturbing activities (including staging areas), dens shall be avoided by installation of highly visible orange construction fencing a minimum of 100 feet from the den, designating the area an

Environmentally Sensitive Area (ESA). Fencing shall be installed in a manner that allows badgers to move through the fencing at-will. No equipment, vehicles, or personnel shall be permitted within ESAs without clear permission from a qualified biologist.

4.5 Construction Best Practices for Biological Resource Protection

The Study Area is a habitat virtually isolated by surrounding development and therefore does not serve the function of habitat connectivity for terrestrial animals. Residential development and infrastructure surrounding the Study Area restrict wildlife movement between habitats. The Study Area lacks significant wildlife movement corridors, such as streams, for animals to move into adjacent habitats. For species that fly such as birds, bats, and insects, the Study Area serves as a wildlife movement corridor between the coast and inland areas, providing both food and cover for animals.

The proposed development will not disrupt known major wildlife movement corridors. However, permanent loss of habitat and increased presence of human activity and increased vehicular traffic may negatively affect wildlife movement. During construction, we recommend measures to minimize impacts to plants and animals, and protect wildlife moving through work areas.

For all Project personnel associated with ground disturbance or any activities that may affect plants or animals, training shall be provided prior to and during onboarding at the Project site. Home construction activities will also require weekly nesting bird inspections from March 15 to August 15 to provided worker training and reduce potential for work interruptions caused by completed nests in empty structures, equipment, or materials.

BIO-13 Cover Excavations

During construction, all trenches, holes, and other excavations with sidewalls steeper than a 1:1 (45 degree) slope and 2 or more feet deep shall be covered when workers or equipment are not actively working in the excavation. If any such excavations remain uncovered, they shall have an escape ramp of earth or a non-slip material with a 1:1 (45 degree) slope or flatter. All excavated areas shall be inspected for wildlife before backfilling.

BIO-14 Biodegradable Erosion Control

During construction, use erosion control products made of natural fiber (biodegradable) to prevent wildlife from getting ensnared or strangled by monofilament, coir rolls, erosion control mats or blankets, straw or fiber wattles, or similar erosion control products.

BIO-15 Worker Environmental Training (WET) Program

Prior to implementation of construction activities (including staging and mobilization), ensure all personnel associated with Project construction attend a training to facilitate worker environmental awareness. The WET shall be conducted by a County-approved qualified biologist to help workers recognize special status plants and animals to be protected in the Project area. The training program shall include:

- Identification of relevant sensitive species and habitats.
    - Description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and avoidance measures required to reduce impacts to biological resources within the work area;

  - Consequences for non-compliance;
  - Fact sheet with information covered in training for distribution to all contractors and other personnel involved with construction of the Project.
  - Web-link to maps showing locations of special status taxa onsite, and literature and photographs or illustrations of sensitive plants, animals and habitats.
- Documentation of each employee's participation in trainings and information presented.
- Annual renewal training for the duration of the Project.

The Contractor shall set aside time for the Project Biologist to provide Worker Environmental Training for all Contractor's and Subcontractor's employees that will be onsite regarding resource protection. Topics will include regulatory framework and best practices to avoid and minimize impacts to protected plants, animals, and their habitats. Approximately one-half hour for training shall be allocated. Each group of new personnel or individuals shall be provided with an environmental briefing by the Project Biologist. This training may be virtual. During morning safety briefings, the Project Biologist may provide updates related to environmental conditions affected by scheduled actions.

Contractor's and Subcontractor's employees will be given a pocket-sized booklet by the Project Biologist in digital and/or paper format summarizing environmental training. Booklet prepared by the Project Biologist will include points of contact and protocol regarding emergencies and protected resource matters. Contractor's and Subcontractor's employees shall be familiar with the information in the booklet and shall follow all rules and directions in the booklet while performing work for the project. Contractor's and Subcontractor's employees shall always have a copy of the booklet while on the project site.

BIO-16 Public Education Program

In support of mitigation measures listed above, public education shall be provided to homeowners, commercial facility owners, and investors regarding protected plants, animals, and their habitat. A colorful booklet shall be distributed to homeowners, commercial owners, and occupants. Information in the booklet shall also be made available as an interactive website provided to the County of San Luis Obispo, and to the Owners Association(s). Information shall include descriptions of sensitive plant and animal habitats impacted, protected, and mitigations implemented. Diagnostic information for sensitive plant and animal taxa, and their habitats, shall be provided in a reader-friendly format. Booklet and website text shall be prepared by technical experts and produced in cooperation with professional graphic artists and publication specialists.

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6 APPENDICES

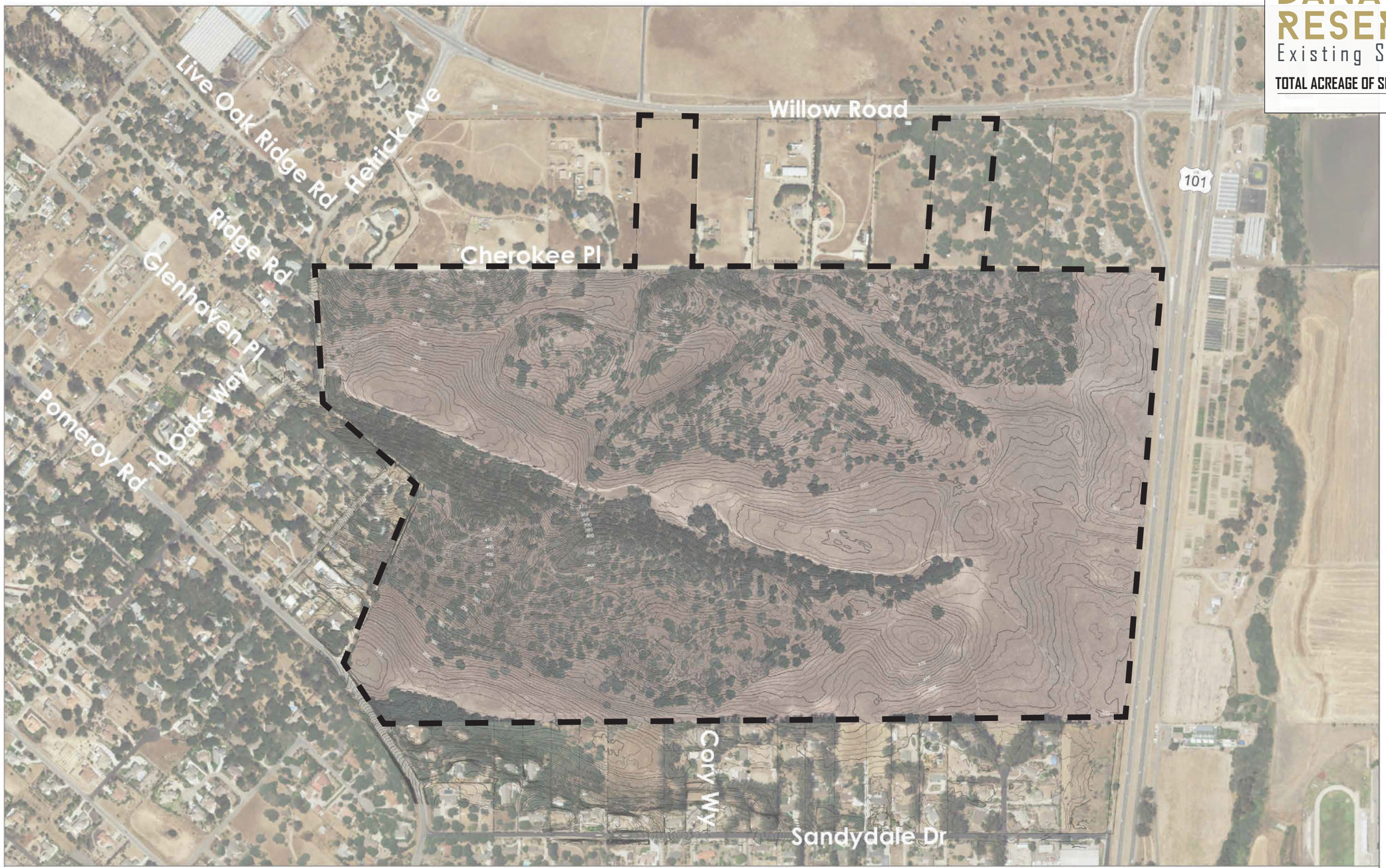
- **Appendix A. Overall Site Plan**
- **Appendix B. USFWS National Wetland Inventory Dana Reserve**
- **Appendix C. Special Status Plants Reported from the Region**
- **Appendix D. Special Status Animals Reported from the Region**
- **Appendix E. USFWS IPAC Resources List**
- **Appendix F. Dana Reserve Historical Aerial Imagery**
- **Appendix G. Habitat Descriptions for Dana Ridge Ranch**
- **Appendix H. Potential Mitigation Sites for Burton Mesa Chaparral**

APPENDIX A. OVERALL SITE PLAN

DANA RESERVE

Existing Site Plan

TOTAL ACREAGE OF SITE = 288 ACRES



LEGEND

- Dana Reserve Boundary
- Surrounding Property Lines
- 1-Foot Contours
- 5-Foot Contours

Notes/Sources: July 15,2019

1) Aerial photo from CCAM - date 2017.
2) Aerial photo from the NAIP - date 2016.
3) Topography data MBS Land Surveys - date 2017.
4) Boundary data from SLO County.

1 : 150 (24X36 SHEET)
0 75 150 300
1:300 (12X18 SHEET)

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rrm design group

V.30 - October 7, 2021

ĐANA RESERVE

LAND USE & PUBLIC ROADS

GROSS LAND USE TOTALS

COLOR	LAND USE	ACRES	%
	RESIDENTIAL MULTI-FAMILY (DR-MF)	23.5	8.2%
	RESIDENTIAL SINGLE FAMILY- TRADITIONAL (DR-SF1)	132.6	46.0%
	RESIDENTIAL SINGLE FAMILY (DR-SF2)	16.9	5.9%
	RECREATION (DR-REC)	11.0	3.8%
	PRIMARY ROADS	21.9	7.6%
	RURAL RESIDENTIAL (RR) - EXISTING	10	3.5%
	RESIDENTIAL SUBTOTAL:	**215.9**	**75%**
	FLEX COMMERCIAL (DR-FC)	17.9	6.2%
	VILLAGE COMMERCIAL (DR-VC)	4.4	1.5%
	COMMERCIAL SUBTOTAL:	**22.3**	**7.7%**
	OPEN SPACE (DR-OS)	49.8	17.3%
	TOTAL:	**288**	**100%**

GROSS TOTAL ACREAGE OF SITE = 288 ACRES

*** ALL STATISTICS ARE APPROXIMATE**

1 : 200 (24x36 sheet)
0 100 200 400
1:400 (12x18 sheet)

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V.30 - October 7, 2021

DANA RESERVE

Conceptual Master Plan

GROSS ACREAGE SUMMARY:

UNDEVELOPED SITE ACRES*=	59.8 ACRES=	20.8%
DEVELOPED SITE ACRES=	228.2 ACRES=	79.2%
GROSS ACREAGE OF SITE =	**288 ACRES**	

* UNDEVELOPED SITE COMPRISE OF 49.8 AC OF OPEN SPACE (OS) & 10 AC OF RESIDENTIAL RURAL (RR)

NET DEVELOPED AREAS

		% OF NET SITE
HOUSING DEVELOPMENT=	173 ACRES =	75.8%
PUBLIC PARKS=	11.0 ACRES =	4.8%
PUBLIC COLLECTORS=	21.9 ACRES =	9.6%
COMMERCIAL=	22.3 ACRES =	9.8%

DEVELOPED ACREAGE OF SITE = 228.2 ACRES

HOUSING DEVELOPMENT NEIGHBORHOOD TOTALS ON GROSS SITE

LAND USE TOTALS

NBD	PRODUCT TYPE	LAND USE	LAND USE ACRES	% OF GROSS SITE	UNIT COUNT
1	MULTI-FAMILY	DR-MF	8.7	3.0%	173
2	MULTI-FAMILY	DR-MF	10.5	3.6%	210
3	CLUSTER	DR-SF2	16.9	5.9%	124
4	4,000.5000 SF LOT	DR-SF1	11.4	4.0%	72
5	4,000-5,000 SF LOT	DR-SF1	17.2	6.0%	104
6	4,000-5,000 SF LOT	DR-SF1	18.6	6.5%	114
7	4,500-8,700 SF LOT	DR-SF1	28.9	10.0%	157
8	5,000-8,600 SF LOT	DR-SF1	16.8	5.8%	62
9	4,500 SF - 10,000 SF LOT	DR-SF1	39.7	13.8%	198
SUBTOTAL:	-		168.7	58.6%	1,214
10	AFFORDABLE (6% MIN. REQ'D)	DR-MF	4.3	1.4%	75 MIN (72.84 REQ'D)
N/A	INTERNAL NEIGHBORHOOD ROADS[1]	-	-	-	-
N/A	POCKET PARKS (PARK)[1]	-	-	-	
N/A	PUBLIC RECREATION	DR-REC	11	3.8%	-
N/A	PRIMARY ROADS	-	21.9	7.6%	-
N/A	PARK AND RIDE[2]	-	-	-	-
N/A	RESIDENTIAL RURAL[3]	RR	10	3.5%	-
	TOTAL:		215.9	75%	1,289

*** ALL STATISTICS ARE APPROXIMATE**

COMMERCIAL TOTALS ON GROSS SITE

LAND USE TOTALS

	LAND USE	LAND USE ACRES	% OF GROSS SITE
FLEX COMMERCIAL	DR-FC	17.9	6.2%
VILLAGE COMMERCIAL	DR-VC	4.4	1.5%
TOTAL:		22.3	7.7%

OPEN SPACE ON GROSS SITE

LAND USE TOTALS

	LAND USE	LAND USE ACRES	% OF GROSS SITE
OPEN SPACE	DR-OS	49.8	17.3%
TOTAL:		49.8	17.3%

GROSS TOTAL ACREAGE OF SITE = 288 ACRES

* ALL STATISTICS ARE APPROXIMATE

MAP FEATURES

- Primary Entry Feature
- Secondary Entry Feature
- 8' deep Storm water Basin
- Shallow 2 foot deep Storm Water Basin
- Bus Pullout / Transit Stop Locations
- Equestrian Trail Head
- Equestrian Trail (3.1 miles)
- Pedestrian Trail (3.8 miles)

1 : 200 (24x36 sheet)
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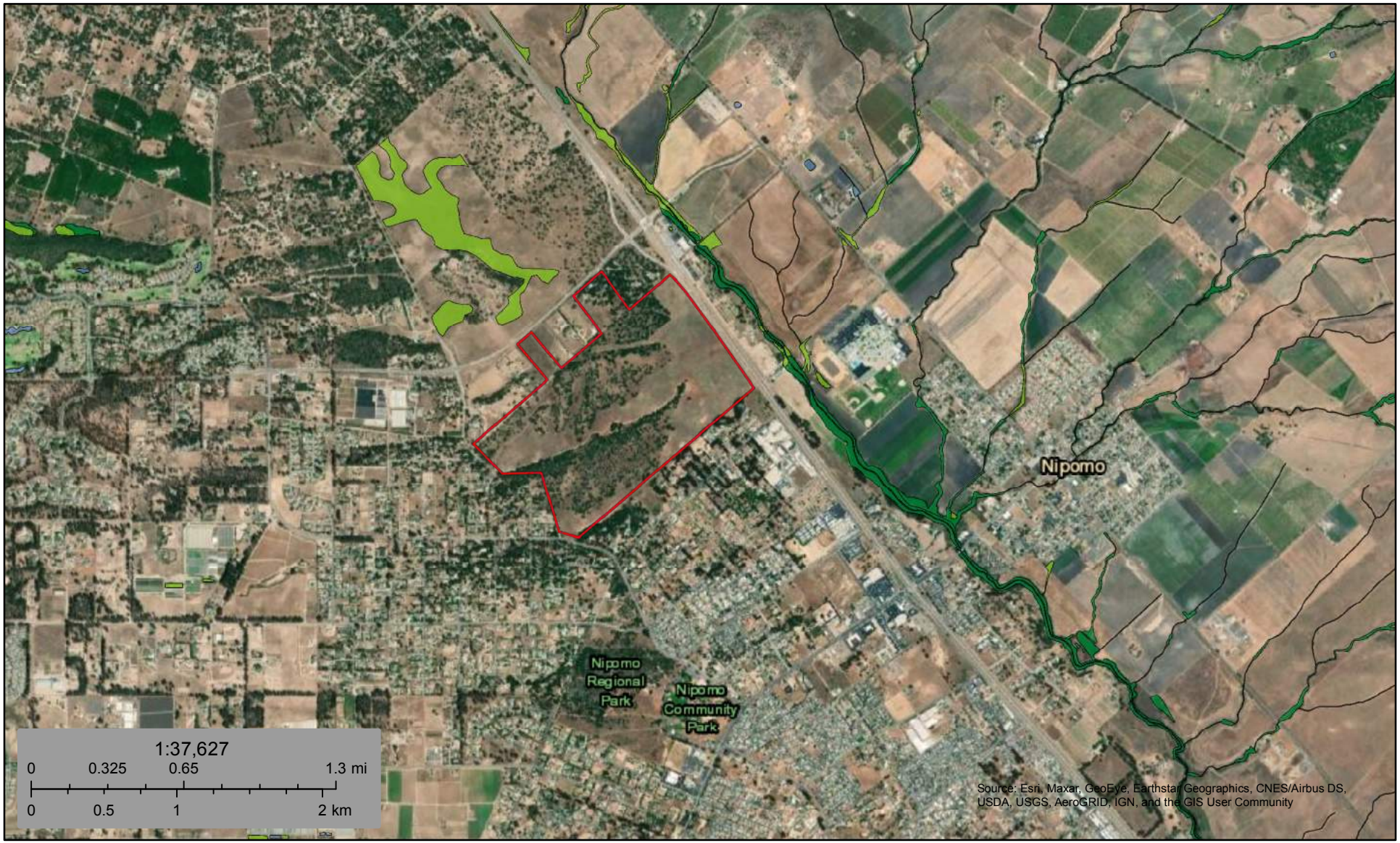
rrm design group

V.30 - October 7, 2021

APPENDIX B. USFWS NATIONAL WETLAND INVENTORY DANA RESERVE

U.S. Fish and Wildlife Service
National Wetlands Inventory

Appendix B. Dana Reserve



November 4, 2020

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

APPENDIX C. SPECIAL STATUS PLANTS REPORTED FROM THE REGION

APPENDIX C. SPECIAL STATUS PLANTS REPORTED FROM THE REGION

	Scientific Name	Common Name	Federal/State Status Global/State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
1.	*Abronia maritima*	**Red Sand-Verbena**	-/- G4/S3? 4.2	Feb-Nov	Coastal dunes. <100 m.	None. Suitable habitat is not present in the Study Area.
2.	*Agrostis hooveri*	**Hoover's Bent Grass**	-/- G2/S2 1B.2	Apr-Jul	Open chaparral, oak woodland. Dry sandy soils. <600 m.	High. Suitable habitat is present in the Study Area. CNDDB #8 located 3.8 (1988) miles west of Study Area.
3.	*Amsinckia douglasiana*	**Douglas' Fiddleneck**	-/- G4/S4 4.2	Mar-May	Valley and foothill grassland. Dry habitats with unstable shaly sedimentary slopes. 150-1600 m.	None. Suitable habitat (soils) is not present in the Study Area.
4.	*Aphanisma blitoides*	**Aphanisma**	-/- G3G4/S2 1B.2	Feb-Jun	Coastal bluff scrub, coastal dunes. Sandy or clay soils. <300 m.	None. Suitable habitat is not present in the Study Area.
5.	*Arctostaphylos crustacea* ssp. *eastwoodiana*	**Eastwood's Brittle-Leaf Manzanita**	-/- G4T2/S2 1B.1	Mar	Maritime chaparral, closed-cone conifer forest. Sandy soils. <650 m.	None. Suitable habitat (soils) is not present in the Study Area and species (perennial shrub) was not detected during surveys.
6.	*Arctostaphylos luciana*	**Santa Lucia Manzanita**	-/- G2/S2 1B.2	Dec-Mar	Chaparral. On shale outcrops, slopes, near coast. 100-800m	None. Suitable habitat (soils) is not present in the Study Area and species (perennial shrub) was not detected during surveys.
7.	*Arctostaphylos obispoensis*	**Bishop Manzanita**	-/- G3/S3 4.3	Feb-Jun	Chaparral, open closed-cone forest near coast. Rocky, generally serpentine soils. 60-950m.	None. Suitable habitat (soils) is not present in the Study Area and species (perennial shrub) was not detected during surveys.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
8.	*Arctostaphylos pechoensis*	**Pecho Manzanita**	-/- G2/S2 1B.2	Nov-Mar	Chaparral, conifer forest. Shale outcrops. <500 m.	None. Suitable habitat (soils) is not present in the Study Area and species (perennial shrub) was not detected during surveys.
9.	*Arctostaphylos pilosula*	**Santa Margarita Manzanita**	-/- G2?/S2? 1B.2	Dec-May	Chaparral. Shale outcrops, slopes. 30-1250 m.	None. Suitable habitat (soils) is not present in the Study Area and species (perennial shrub) was not detected during surveys.
10.	*Arctostaphylos purissima*	**La Purisima Manzanita**	-/- G2/S2 1B.1	Nov-May	Chaparral. Sandstone outcrops, sandy soils. <300 m.	None. Suitable habitat is present; however, Study Area is outside of species expected range (Kauffman et. al 2015), and species (perennial shrub) was not detected during surveys.
11.	*Arctostaphylos rudis*	**Sand Mesa Manzanita**	-/- G2/S2 1B.2	Nov-Feb	Chaparral. Sandy soils. <380 m.	**Present**. Suitable sandy chaparral habitat is present in the Study Area and species was observed during surveys.
12.	*Arenaria paludicola*	**Marsh Sandwort**	FE/CE G1/S1 1B.1	May-Aug	Wet meadows, marshes, swamps. Sandy soils <300 m.	None. Suitable wetland/mesic habitat is not present in the Study Area. All records in the vicinity are considered extirpated or possibly extirpated.
13.	*Astragalus didymocarpus* var. *milesianus*	**Miles' Milk-Vetch**	-/- G5T2/S2 1B.2	Mar-Jun	Coastal scrub and grassy areas near coast. Clay soils. <400 m.	None. Suitable habitat (soils) is not present in the Study Area.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
14.	*Astragalus nuttallii* var. *nuttallii*	**Ocean Bluff Milk-Vetch**	-/- G4T4/S4 4.2	Jan-Nov	Coastal bluffs, dunes. Sandy soils. <250 m.	None. Suitable habitat is not present and the Study Area is inland of this species' known distribution.
15.	*Atriplex serenana* var. *davidsonii*	**Davidson's Saltscale**	-/- G5T1/S1 1B.2	Apr-Oct	Coastal bluff scrub, coastal scrub. Alkaline soil. <200 m.	None. Suitable habitat is not present in the Study Area.
16.	*Calandrinia breweri*	**Brewer's Calandrinia**	-/- G4/S4 4.2	Mar-Jun	Chaparral, coastal scrub. Disturbed sites, burns. Sandy to loamy soil. <1200 m.	Moderate. Suitable habitat is present in the Study Area. CCH record (SD71144; 1948) located 9.5 miles to the north west.
17.	*Calochortus clavatus* var. *clavatus*	**Club-Haired Mariposa Lily**	-/- G4T3/S3 4.3	Mar-Jun	Chaparral, cismontane woodland, valley and foothill grassland, coastal scrub. Generally serpentine clay, rocky soils. <1300 m.	None. Suitable habitat (soils) is not present in the Study Area.
18.	*Calochortus obispoensis*	**San Luis Mariposa Lily**	-/- G2/S2 1B.2	May-Jul	Open chaparral, cismontane woodland, coastal scrub, grasslands. Dry serpentine substrates. 100-500 m.	None. Suitable habitat (soils) is not present in the Study Area.
19.	*Calochortus simulans*	**La Panza Mariposa Lily**	-/- G2/S2 1B.3	Apr-Jun	Grassland, coniferous woodland, chaparral. Decomposed granitic sand, sometimes serpentine. <1100 m.	None. Study Area is generally outside of the species' known range and suitable habitat (soils) is not present in the Study Area.
20.	*Calystegia subacaulis* ssp. *episcopalis*	**Cambria Morning-Glory**	-/- G3T2?/S2? 4.2	Mar-Jul	Dry woodland, open scrub. Usually clay soil. <500 m.	None. Suitable habitat (soils) is not present in the Study Area.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
21.	*Carex obispoensis*	**San Luis Obispo Sedge**	-/- G3?/S3? 1B.2	Apr-Jun	Seeps and springs within chaparral, coniferous forest, coastal scrub, grassland. Usually in transition zone on sand, clay, serpentine, or gabbro. <800 m.	None. Suitable habitat is not present in the Study Area.
22.	*Castilleja densiflora* ssp. *obispoensis*	**San Luis Obispo Owl's-Clover**	-/- G5T2/S2 1B.2	Mar-May	Coastal grassland. Often serpentine soil. <400 m.	None. Study Area is generally outside of the species' known range and suitable habitat (soils) is not present in the Study Area.
23.	*Ceanothus cuneatus* var. *fascicularis*	**Lompoc Ceanothus**	-/- G5T4/S4 4.2	Feb-Apr	Coastal chaparral. Sandy substrates. <275 m.	**Present**. Suitable habitat is present in the Study Area and species was observed during surveys.
24.	*Ceanothus gloriosus* var. *gloriosus*	**Point Reyes Ceanothus**	-/- G4T4/S4 4.3	Mar-May	Coastal bluff scrub, dunes, closed-cone-pine forest. Sandy soils. <500 m.	None. Study Area is generally outside of the species' known range and suitable habitat is not present in the Study Area.
25.	*Ceanothus impressus* var. *impressus*	**Santa Barbara Ceanothus**	-/- G3T2/S2 1B.2	Feb-Apr	Chaparral. Canyons, flats. Sandy substrates. <320 m.	None. Study Area is generally outside of the species' known range.
26.	*Ceanothus impressus* var. *nipomensis*	**Nipomo Mesa Ceanothus**	-/- G3T2/S2 1B.2	Feb-Apr	Chaparral. Canyons, flats. Sandy substrates. <200 m.	**Present**. Suitable habitat is present in the Study Area and species was observed during surveys.
27.	*Centromadia parryi* ssp. *congdonii*	**Congdon's Tarplant**	-/- G3T1T2/S1S2 1B.1	May-Nov	Grassland, disturbed sites. Terraces, swales, floodplains, Alkaline, heavy clay soil <300 m.	None. Suitable habitat is not present in the Study Area.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
28.	*Chenopodium littoreum*	**Coastal Goosefoot**	-/- G1/S1 1B.2	Apr-Aug	Coastal dunes. Sandy soils. <40 m.	None. Study Area is generally outside of the species' known range.
29.	*Chlorogalum pomeridianum* var. *minus*	**Dwarf Soaproot**	-/- G5T3/S3 1B.2	May-Aug	Chaparral. Serpentine outcrops. <750 m.	None. Suitable habitat (soils) is not present in the Study Area.
30.	*Chorizanthe aphanantha*	**Irish Hills Spineflower**	-/- G1/S1 1B.1	Apr-Jun	Chaparral, coastal scrub. Rocky serpentine sites and barren areas. Known from Irish Hills Natural Reserve. 100-370 m.	None. Study Area is generally outside of the species' known range and suitable habitat (soils) is not present.
31.	*Chorizanthe breweri*	**Brewer's Spineflower**	-/- G3/S3 1B.3	Apr-Aug	Chaparral, cismontane woodland, coastal scrub. Rocky serpentine sites; barren areas. 60-800 m.	None. Suitable habitat (soils) is not present in the Study Area.
32.	*Chorizanthe palmeri*	**Palmer's Spineflower**	-/- G4/S4 4.2	Apr-Aug	Chaparral, cismontane woodland, grassland. Clay soils, generally in areas of serpentine or partially serpentinized igneous rock. 60-700 m.	None. Suitable habitat (soils) is not present in the Study Area.
33.	*Chorizanthe rectispina*	**Straight-Awned Spineflower**	-/- G2/S2 1B.3	Apr-Jul	Chaparral, cismontane woodland, coastal scrub. In disintegrating shale, often on granite. 200-600 m.	Low. Marginal suitable habitat is present in the Study Area. CNDDB #20 (2003) located 7.3 miles to the north west.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
34.	*Cirsium fontinale* var. *obispoense*	**San Luis Obispo Fountain Thistle**	FE/CE G2T2/S2 1B.2	Feb-Sep	Grassland, riparian influenced woodland and chaparral, coastal scrub. Serpentine seeps. <350 m.	None. No suitable serpentine seep habitat is present in the Study Area. The nearest record (OBI 60973; 1999) is located 8.4 miles northeast of the Study Area.
35.	*Cirsium occidentale* var. *compactum*	**Compact Cobwebby Thistle**	-/- G3G4T2/S2 1B.2	Apr-Jun	Coastal dune scrub, occassionally grassland. Found near coast On sand or sometimes clay soils. <50 m.	None. Suitable habitat is not present in the Study Area.
36.	*Cirsium rhothophilum*	**Surf Thistle**	-/CT G1/S1 1B.2	Apr-Jun	Coastal bluff scrub and dunes. Open areas, sand. <20 m.	None. No coastal sand dune habitat is present in the Study Area. The nearest record (UCJEPS UC1276309; 1950) is located 6 miles west of the Study Area. Outside of elevation range.
37.	*Cirsium scariosum* var. *loncholepis*	**La Graciosa Thistle**	FE/CT G5T1/S1 1B.1	May-Aug	Coastal scrub and dunes, brackish marshes, riparian woodland and grassland. Water edge, wetlands. Mesic, sandy sites. < 50 m	None. No wetland/mesic suitable habitat present in the Study Area. The nearest presumed extant record (CNDDB#11; 2018) is located 5.6 miles northwest of the Study Area. Outside of known elevation range.
38.	*Cistanthe maritima*	**Seaside Cistanthe**	-/- G3G4/S3 4.2	Feb-Aug	Coastal bluff scrub. Sea bluffs, sand. <300 m.	None. Study Area is generally outside of the species' known range and suitable habitat is not present in the Study Area.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
39.	*Cladium californicum*	**California Sawgrass**	-/- G4/S2 2B.2	Jun-Sep	Meadows and seeps, marshes. Freshwater or alkaline moist habitat. <2150 m.	None. Suitable habitat is not present in the Study Area.
40.	*Clarkia speciosa* ssp. *immaculata*	**Pismo Clarkia**	FE/CR G4T1/S1 1B.1	May-Jul	Woodland edges, chaparral, disturbed grassland. Openings in sandy soil. < 100 m.	**Present**. Suitable habitat is present in the Study Area and species was observed during surveys.
41.	*Convolvulus simulans*	**Small-Flowered Morning-Glory**	-/- G4/S4 4.2	Mar-Jul	Annual grassland, coastal-sage scrub, chaparral. Clay substrates, occasionally serpentine. 30-875 m.	None. Suitable habitat (soils) is not present in the Study Area.
42.	*Deinandra increscens* ssp. *villosa*	**Gaviota Tarplant**	FE/CE G4G5T2/S2 1B.1	May-Oct	Coastal bluff scrub, grassland. Sandy blowouts amid sandy loam soil. 30-50 m.	None. No suitable coastal bluff scrub or sandy loam soil habitat. Study Area is outside of subspecies' known ranges. No known records within ten miles.
43.	*Deinandra paniculata*	**Paniculate Tarplant**	-/- G4/S4 4.2	May-Nov	Grassland, open chaparral and woodland. Disturbed areas, often in sandy soils in mesic sites. <1320 m.	Low. Marginal suitable habitat is present in the Study Area and CCH record (RSA699628; 1935) is located ~5 miles to the west.
44.	*Delphinium parryi* ssp. *blochmaniae*	**Dune Larkspur**	-/- G4T2/S2 1B.2	Apr-Jun	Coastal chaparral and dunes. Sandy soils. <200 m.	High. Suitable habitat is present in the Study Area. CNDDB # 23 (1936) located 1.5 miles to the east. Multiple CNDDB occurrences within near vicinity.
45.	*Delphinium parryi* ssp. *eastwoodiae*	**Eastwood's Larkspur**	-/- G4T2/S2 1B.2	Feb-Mar	Coastal chaparral, grassland. In openings on serpentine. 100-500 m.	None. Study Area is generally outside of species range and suitable habitat (soils) is not present.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
46.	*Delphinium umbraculorum*	**Umbrella Larkspur**	-/- G3/S3 1B.3	Apr-Jun	Moist oak forest. Mesic sites. 400-1600 m.	None. Study Area is generally outside of species elevation range and suitable habitat is not present.
47.	*Dithyrea maritima*	**Beach Spectaclepod**	-/CT G1/S1 1B.1	Mar-May	Coastal sand dunes, seashore. Sand. <50 m.	None. Study Area does not contain coastal dune/seashore habitat and is inland of species' known range. The closest extant record (CNDDB#25, 2019), occurs 7 miles west of the Study Area. Study Area is outside of species' elevation range.
48.	*Dudleya abramsii* ssp. *bettinae*	**Betty's Dudleya**	-/- G4T2/S2 1B.2	May-Jul	Coastal scrub, grassland, chaparral. Rocky serpentine outcrops. 50-180 m.	None. Suitable habitat is not present in the Study Area.
49.	*Dudleya abramsii* ssp. *murina*	**Mouse-Gray Dudleya**	-/- G4T2/S2 1B.3	May-Jun	Chaparral, woodland, grassland. Serpentine outcrops. 120-300 m.	None. Suitable habitat is not present in the Study Area.
50.	*Dudleya blochmaniae* ssp. *blochmaniae*	**Blochman's Dudleya**	-/- G3T2/S2 1B.1	Apr-Jun	Coastal scrub, chaparral, grassland. Open, rocky slopes, often serpentine or clay-dominated. <450 m.	None. Suitable habitat is not present in the Study Area.
51.	*Erigeron blochmaniae*	**Blochman's Leafy Daisy**	-/- G2/S2 1B.2	Jun-Aug	Coastal scrub. Sand dunes and hills. <70 m.	None. Study Area is inland of species known range and suitable habitat is not present in the Study Area.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
52.	*Eriodictyon altissimum*	**Indian Knob Mountainbalm**	FE/CE G1/S1 1B.1	Mar-Jun	Maritime chaparral, woodland, coastal scrub. Open sandstone ridges, disturbed areas. <270 m.	None. Study Area does not contain open sandstone ridge habitat and is outside of species' elevation range. No records within 10 miles.
53.	*Eryngium aristulatum* var. *hooveri*	**Hoover's Button-Celery**	-/- G5T1/S1 1B.1	Jun-Aug	Vernal pools, seasonal wetlands. Alkaline depressions, wet ditches. <50 m.	None. Suitable habitat is not present in the Study Area. No records within 10 miles.
54.	*Erysimum suffrutescens*	**Suffrutescent Wallflower**	-/- G3/S3 4.2	Jan-Aug	Stabilized coastal sand dunes, coastal scrub. Coastal dunes and bluffs. <150 m.	Low. Study Area is inland of species known range and marginal suitable habitat present in the Study Area. CCH Record (UCSB041306; 1988) located >5 miles to west.
55.	*Horkelia cuneata* var. *puberula*	**Mesa Horkelia**	-/- G4T1/S1 1B.1	Feb-July	Coastal chaparral, woodland. Dry, sandy or gravelly sites. 70-870 m.	**Present**. Suitable habitat is present in the Study Area and species was observed during surveys.
56.	*Horkelia cuneata* var. *sericea*	**Kellogg's Horkelia**	-/- G4T1?/S1? 1B.1	Apr-Sep	Coastal scrub and dunes, coniferous forest, chaparral. Old dunes, coastal sandhills, openings in sand. <200 m.	High. Suitable habitat is present in the Study Area. CNDDB # 4 (1969) located 1.8 miles to the west.
57.	*Layia jonesii*	**Jones' Layia**	-/- G2/S2 1B.2	Mar-May	Chaparral, grassland. Clay soils, serpentine outcrops and slopes. <300 m.	None. Suitable habitat (soils) is not present in the Study Area.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
58.	*Lomatium parvifolium*	**Small-Leaved Lomatium**	-/- G4/S4 4.2	Jan-Jun	Coniferous woodland, chaparral, coastal scrub. On serpentine outcrops. 70-150 m.	None. Suitable habitat (soils) is not present in the Study Area.
59.	*Lupinus ludovicianus*	**San Luis Obispo County Lupine**	-/- G1/S1 1B.2	Apr-Jul	Chaparral, woodland. Open, grassy areas, on limestone. 50-500 m.	None. Suitable habitat (soils) is not present in the Study Area.
60.	*Lupinus nipomensis*	**Nipomo Mesa Lupine**	FE/CE G1/S1 1B.1	Dec-May	Coastal dunes with dune scrub. Back stable dunes. <25 m.	None. Study Area is outside of species known range and coastal dune habitat is not present in the Study Area. The nearest presumed extant record (CNDDB#1; 2017) is located 3.9 miles west of the Study Area.
61.	*Malacothamnus gracilis*	**Slender Bush-Mallow**	-/- G1Q/S1 1B.1	May-Oct	Chaparral. Dry, rocky slopes. 250-830 m.	None. Suitable habitat (soils) is not present in the Study Area. Species (perennial shrub) was not observed during surveys.
62.	*Malacothamnus jonesii*	**Jones' Bush-Mallow**	-/- G4/S4 4.3	Mar-Oct	Chaparral, foothill woodland. Open areas. 250-830 m.	None. Species (perennial shrub) was not observed during surveys.
63.	*Malacothrix incana*	**Dunedelion**	-/- G3G4/S3S4 4.3	Apr-Oct	Coastal Dunes. Sand. <35 m.	None. Study Area is inland of species known range and suitable habitat is not present in the Study Area.
64.	*Monardella sinuata* ssp. *sinuata*	**Southern Curly-Leaved Monardella**	-/- G3T2/S2 1B.2	Apr-Sep	Chaparral, woodland, coastal sage scrub and dunes. Sandy soils, coastal strand, dune. <300 m	High. Suitable habitat is present in the Study Area. CNDDB #28 (1948) located 2.7 miles to west.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
65.	*Monardella undulata* ssp. *crispa*	**Crisp Monardella**	-/- G3T2/S2 1B.2	Apr-Aug	Coastal scrub, active dunes. Borders of back dune scrub, sand. < 100 m	None. Study Area is inland of species known range and suitable habitat is not present in the Study Area.
66.	*Monardella undulata* ssp. *undulata*	**San Luis Obispo Monardella**	-/- G2/S2 1B.2	May-Sep	Coastal scrub, stabilized dunes. Stabilized sandy soils. <200 m.	High. Suitable habitat (stabilized sandy soil) is present in the Study Area. A portion of CNDDB #37 (1979) occurs within the Study Area to the south. Additional CCH records in the near vicinity.
67.	*Mucronea californica*	**California Spineflower**	-/- G3/S3 4.2	Mar-Aug	Chaparral, woodland, coastal scrub, grassland. Sandy soil. <1000 m.	**Present**. Suitable habitat is present in the Study Area and species was observed during surveys.
68.	*Muhlenbergia utilis*	**aparejo grass**	-/- G4/S2S3 2B.2	Oct- Mar	Wet sites along streams and ponds.250-1000 m.	None. Suitable streams and ponds are not present in the Study Area. The closest presumed extant record (CNDDB#9; 1979) occurs 10 miles northeast of the Study Area.
69.	*Nasturtium gambelii*	**Gambel's Water Cress**	FE/CT G1/S1 1B.1	Apr-Oct	Marshes, streambanks. Margins, just above water level. <350 m.	None. Suitable wetland/mesic habitat is not present in the Study Area. The closest extant record (CNDDB#1; 2014) occurs 6.1 miles west of the Study Area.
70.	*Nemacaulis denudata* var. *denudata*	**Coast Woolly-Heads**	-/- G3G4T2/S2 1B.2	Apr-Sep	Beaches, coastal dunes. Sand. <100 m.	None. Study Area is inland of species known range and suitable habitat is not present in the Study Area.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
71.	*Nemacladus secundiflorus* var. *robbinsii*	**Robbins' Nemacladus**	-/- G3T2/S2 1B.2	Apr-Jun	Chaparral, grassland. Dry, gravelly slopes in openings. 350-1700 m.	None. Suitable habitat (soils) is not present in the Study Area. Outside of likely range and no known records exist within 10 miles.
72.	*Orobanche parishii* ssp. *brachyloba*	**Short-Lobed Broomrape**	-/- G4?T4/S3 4.2	Apr-Oct	Coastal bluff scrub, dunes. Near ocean, sandy soils, generally parasitizing *Isocoma menziesii*. <300 m.	None. Study Area is inland of species known range and suitable habitat and known host plants are not present in the Study Area.
73.	*Perideridia pringlei*	**Adobe Yampah**	-/- G4/S4 4.3	Apr-Jul	Chaparral, woodland, coastal scrub. Grassland hillsides, seasonally wet sites, serpentine, clay soil. 300-1800 m.	None. Suitable habitat (soils) is not present in the Study Area. Outside of likely range and no known records exist within 10 miles.
74.	*Piperia michaelii*	**Michael's Rein-Orchid**	-/- G3/S3 4.2	Apr-Aug	Coastal scrub, woodland, chaparral. Generally on dry sites. <700 m.	**Present**. Suitable habitat is present in the Study Area and species was observed during surveys.
75.	*Prunus fasciculata* var. *punctata*	**Sand Almond**	-/- G5T4/S4 4.3	Mar-Apr	Coastal scrub, chaparral, woodland. Sandy flats. <200 m.	**Present**. Suitable habitat is present in the Study Area and species was observed during surveys.
76.	*Sanicula hoffmannii*	**Hoffmann's Sanicle**	-/- G3/S3 4.3	Mar-May	Broadleafed upland forest, lower montane coniferous forest, coastal scrub, chaparral. Slopes with moist, shaded serpentine or clay soils. <500 m.	None. Suitable habitat is not present in the Study Area.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CA Rare Plant Rank	Blooming Period	Habitat Preference	Potential to Occur
77.	*Scrophularia atrata*	**Black-Flowered Figwort**	-/- G2?/S2? 1B.2	Mar-Jul	Coniferous forest, chaparral, coastal scrub, riparian scrub. Sand, calcium-diatom-rich soils, around swales. <400 m.	High. Suitable sandy coastal habitats are present in the Study Area. CNDDB #63 (2005) located 2.75 miles to north west.
78.	*Senecio aphanactis*	**Chaparral Ragwort**	-/- G3/S2 2B.2	Jan-May	Chaparral, woodland, and coastal scrub. Drying alkaline flats, dry open rocky areas. 10-550 m.	None. Suitable habitat (soils) is not present in the Study Area with no nearby records.
79.	*Senecio astephanus*	**San Gabriel Ragwort**	-/- G3/S3 4.3	May-Jul	Chaparral, coastal-sage scrub, oak woodland. Steep rocky slopes. 400-1500 m.	None. Suitable habitat (soils) is not present in the Study Area and outside of likely range.
80.	*Senecio blochmaniae*	**Blochman's Ragwort**	-/- G3/S3 4.2	May-Oct	Coastal sand dunes, sandy floodplains. <150 m.	None. Species (perennial shrub) was not detected during surveys. Study Area is slightly inland of known range.
81.	*Solidago guiradonis*	**Guirado's Goldenrod**	-/- G3/S3 4.3	Sep-Oct	Woodland, grassland. Perennial stream banks and seeps, serpentine. 600-900 m.	None. Suitable habitat is not present in the Study Area. Outside of likely range.
82.	*Symphyotrichum defoliatum*	**San Bernardino Aster**	-/- G2/S2 1B.2	Jul-Nov	Meadows, seeps, coastal scrub, grassland, woodland. Vernally mesic grassland near ditches, streams and springs; disturbed places. <2050 m.	None. Suitable habitat is not present in the Study Area.

California Geographic Subregion Abbreviations:

CCo: Central Coast
SCo: South Coast
SnFrB: San Francisco Bay
TR: Transverse Ranges
SLO: San Luis Obispo
SN: Sierra Nevada
CW: Central West
SW: South West

SCoR: South Coast Ranges
SCoRO: Outer South Coast Ranges
SCoRI: Inner South Coast Ranges
WTR: Western Transverse Ranges
SnJV: San Joaquin Valley
ScV: Sacramento Valley
SnJt: San Jacinto Mtns
SnBr: San Bernardino
Teh: Tehachapi Mtn Area
DMoj: Mojave Desert
PR: Peninsular Range

State/Rank Abbreviations:

FE: Federally Endangered
FT: Federally Threatened
PE: Proposed Federally Endangered
PT: Proposed Federally Threatened
CE: California Endangered
CR: California Rare
CT: California Threatened
CCE: Candidate for California Endangered
CCT: Candidate for California Threatened

California Rare Plant Ranks:

CRPR 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere
CRPR 2A: Plants presumed extirpated in California, but common elsewhere
CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere
CRPR 4: Plants of limited distribution - a watch list

CRPR Threat Ranks:

0.1 - Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2 - Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3 - Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Global/State Ranks

G1/S1 – Critically Imperiled
G2/S2 – Imperiled
G3/S3 – Vulnerable
G4/S4 – Apparently Secure
G5/S5 – Secure

Q – Element is very rare but there are taxonomic questions associated with it.
Range rank – (e.g., S2S3 means rank is somewhere between S2 and S3)
? – (e.g., S2? Means rank is more certain than S2S3 but less certain that S2)

APPENDIX D. SPECIAL STATUS ANIMALS REPORTED FROM THE REGION

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	Scientific Name	Common Name	Federal/State Status Global/State Rank CDFW Status	Habitat Preference	Potential to Occur
1.	*Ablautus schlingeri*	**Oso Flaco Robber Fly**	-/- G1/S1 SA	Sand dunes.	No. Suitable habitat is not available in the Study Area.
2.	*Accipiter cooperii*	**Cooper's Hawk***	-/- G5/S4 WL	Oak woodland, riparian, open fields, Nests in dense trees, especially coast live oak	Present. This species was observed during 2020 surveys foraging in the coast live oak woodland habitat.
3.	*Accipiter striatus*	**Sharp-Shinned Hawk**	-/- G5/S4 WL	Riparian, coniferous, and deciduous woodlands near water.	Moderate. Suitable prey (passerines) is available in the Study Area.
4.	*Agelaius tricolor*	**Tricolored Blackbird**	-/CT G2G3/S1S2 SSC	Requires open water, protected nesting substrate, & foraging area with insect prey near nesting colony.	No. No suitable nesting habitat in the Study Area, but foraging habitat is present.
5.	*Ambystoma californiense*	**California Tiger Salamander**	FT/CT G2G3/S2S3 WL	Need underground refuges, ground squirrel burrows & vernal pools or other seasonal water for breeding.	No. Suitable habitat is not available in the Study Area.
6.	*Anniella pulchra*	**Northern California Legless Lizard**	-/- G3/S3 SSC	Sandy or loose loamy soils under coastal scrub or oak trees. Soil moisture essential.	High. Suitable habitat is available in the Study Area.
7.	*Areniscythris brachypteris*	**Oso Flaco Flightless Moth**	-/- G1/S1 SA	Open, coastal sand dune slopes in San Luis Obispo County.	No. Suitable habitat is not available in the Study Area.
8.	*Antrozus pallidus*	**Pallid Bat***	-/- G5/S3	Rock crevices, caves, tree hollows, mines, old buildings, and bridges.	Present. Limited roosting habitat (no structures and few tree cavities) in the Study

	Scientific Name	Common Name	Federal/State Status Global/State Rank CDFW Status	Habitat Preference	Potential to Occur
			SSC		Area. Vocalizations detected during 2020 acoutic surveys.
9.	*Athene cunicularia*	**Burrowing Owl**	-/- G4/S3 SSC	Burrows in squirrel holes in open habitats with low vegetation.	Low. Suitable habitat (grazed grassland and squirrel burrows) available in the Study Area.
10.	*Atractelmis wawona*	**Wawona Riffle Beetle**	-/- G1G3/S1S2 SA	Strong preference for inhabiting submerged aquatic mosses	No. Suitable aquatic habitat is not available in the Study Area. Closest records is located 16 miles northwest of the Study Area (CNDDB #60).
11.	*Baeolophus inornatus*	**Oak titmouse***	-/- G4/S4 BCC: WL (nesting)	Nests in cavities in oak woodland habitat. Non-migratory.	Present. Numerous oak titmice were observed during 2017, 2018, and 2020 surveys.
12.	*Bombus caliginosus*	**Obscure Bumble Bee**	-/- G4?/S1S2 SA	Open coastal grasslands and meadows. Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia.	Low. Habitat and nectar sources potentially suitable. Sensitive invertebrate surveys provided negeative results for this species.
13.	*Bombus occidentalis*	**Western Bumble Bee**	-/CCE G2G3/S1 SA	Wide variety of natural, agricultural, urban, and rural habitats. Flower-rich meadows of forests and subalpine zones.	Low. Suitable habitat is available in the Study Area. Closest known historical occurrence is located 14 miles northwest (CNDDB #279). Focused sensitive invertebrate surveys provided negative results for this species.
14.	*Branchinecta lynchi*	**Vernal Pool Fairy Shrimp**	FT/- G3/S3 SA	Clear water sandstone depression pools, grassed swale, earth slump, or basalt flow depression pools.	No. Suitable habitat is not available in the Study Area.
15.	*Buteo swainsoni*	**Swainson's Hawk**	-/CT G5/S3 SA	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, agricultural fields.	No. Suitable nesting habitat is available in the Study Area, but breeding population in transverse ranges extirpated.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CDFW Status	Habitat Preference	Potential to Occur
16.	*Charadrius alexandrinus nivosus*	**Western Snowy Plover**	FT/- G3T3/S2S3 SSC	Sandy beaches, salt pond levees, & shorelines of large alkali lakes. Needs friable soils for nesting.	No. Suitable habitat is not available in the Study Area.
17.	*Chlosyne leanira elegans*	**Oso Flaco Patch Butterfly**	-/- G4G5T1T2/S1S2 SA	Sand dune habitat around Oso Flaco Lake, SLO County. Larval food plant is Castilleja affinis.	No. Suitable habitat is not available in the Study Area.
18.	*Cicindela hirticollis gravida*	**Sandy Beach Tiger Beetle**	-/- G5T2/S2 SA	Adjacent to non-brackish water near the coast from San Francisco to N. Mexico. Clean, dry, light-colored sand in the upper zone.	No. Suitable habitat is not available in the Study Area.
19.	*Coccyzus americanus occidentalis*	**Western Yellow-Billed Cuckoo**	FT/CE G5T2T3/S1 SA	Nests in riparian jungles of willow, cottonwood, w/ blackberry, nettles, or wild grape understory. Typically found in larger river systems.	No. Suitable habitat is not available in the Study Area.
20.	*Coelus globosus*	**Globose Dune Beetle**	-/- G1G2/S1S2 SA	Coastal sand dune habitat. Inhabits foredunes and sand hummocks.	No. Suitable habitat is not available in the Study Area.
21.	*Corynorhinus townsendii*	**Townsend's Big-Eared Bat**	-/- G3G4/S2 SSC	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	No. Suitable habitat is not available in the Study Area.
22.	*Danaus plexippus pop. 1*	**Monarch - California Overwintering Population**	-/- G4T2T3/S2S3 SA	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Low. Suitable habitat is not available in the Study Area, eucalyptus adjacent to property may be suitable.
23.	*Elanus leucurus*	**White-Tailed Kite**	-/- G5/S3S4 FP	Nests in dense tree canopy near open foraging areas	Low. Suitable nesting and foraging habitat is available in the Study Area.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CDFW Status	Habitat Preference	Potential to Occur
24.	*Emys marmorata*	**Western Pond Turtle**	-/- G3G4/S3 SSC	Permanent or semi-permanent streams, ponds, lakes.	No. Suitable habitat is not available in the Study Area.
25.	*Eucyclogobius newberryi*	**Tidewater Goby**	FE/- G3/S3 SSC	Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	No. Suitable habitat is not available in the Study Area.
26.	*Falco mexicanus*	**Prairie Falcon**	-/- G5/S4 WL	Inhabits dry, open terrain. Nests on cliffs near open areas for hunting.	No. No suitable nesting habitat in the Study Area, but foraging habitat is present.
27.	*Falco peregrinus anatum*	**American Peregrine Falcon**	FD/CD G4T4/S3S4 FP	Nests on cliffs, banks, dunes, mounds, and human-made structures, especially near water.	No. Suitable habitat is not available in the Study Area.
28.	*Gila orcuttii*	**Arroyo Chub**	-/- G2/S2 SSC	Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	No. Suitable habitat is not available in the Study Area.
29.	*Gymnogyps californianus*	**California Condor**	FE/CE G1/S1 FP	Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	No. Suitable habitat is not available in the Study Area.
30.	*Lasiurnus noctiyagans*	**Silver-haired Bat***	-/- G3G4/S3S4 SSC	Coastal and montane forests, often feeds over water. Roosts in hollow trees, loose bark, woodpecker cavities, rarely in rocks.	Present. Suitable roosting and foraging habitat is available in the Study Area. Vocalizations detected during 2020 acoustic surveys.
31.	*Lasiurus blossevillii*	**Western Red Bat***	-/- G5/S3 SSC	Roosts primarily in trees, from sea level up through mixed conifer forests.	High. Suitable habitat is available in the Study Area. Not detected during 2020 acoustic surveys.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CDFW Status	Habitat Preference	Potential to Occur
32.	*Lasiurus cinereus*	**Hoary Bat***	-/- G5/S5 SA	Forages in open habitats or habitat mosaics with trees. Roosts in dense foliage of medium to large trees. Feeds on moths. Requires water.	Present. Suitable habitat is available in the Study Area. Vocalizations detected during 2020 acoustic surveys.
33.	*Laterallus jamaicensis coturniculus*	**California Black Rail**	-/CT G3G4T1/S1 FP	Occurs in tidal salt marsh heavily grown to pickleweed, also in freshwater and brackish marshes near the coast.	No. Suitable habitat is not available in the Study Area.
34.	*Lichnanthe albipilosa*	**White Sand Bear Scarab Beetle**	-/- G1/S1 SA	Found only in coastal sand dunes of SLO County, near Dune Lake, some distance from the surf.	No. Suitable habitat is not available in the Study Area.
35.	*Myotis yumanensis*	**Yuma Myotis***	-/- G5/S5 SA	Caves, mines, buildings, tree cavities, rock crevices, or under bridges. Feeds near open water	Present. Suitable habitat is available in the Study Area. Vocalizations detected during 2020 acoustic surveys.
36.	*Oncorhynchus mykiss irideus pop. 9*	**Steelhead - South-Central California Coast Dps**	FT/- G5T2Q/S2 SA	Federal listing refers to runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River.	No. Suitable habitat is not available in the Study Area.
37.	*Phrynosoma blainvillii*	**Coast Horned Lizard**	-/- G3G4/S3S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Present. Two observations; suitable habitat is available in the Study Area.
38.	*Picoides nuttallii*	**Nuttall's Woodpecker***	-/- G4G5/ BCC	Oak, riparian woodlands	Present. Nuttall's woodpecker is a year-round resident of oak woodland habitat onsite and was observed during 2017, 2018, 2019, and 2020 surveys.
39.	*Plebejus icarioides moroensis*	**Morro Bay Blue Butterfly**	-/- G5T2/S2 SA	Inhabits stabilized dunes and surrounding areas in coastal SLO County (Morro Bay) and nw SB	No. Suitable habitat is not available in the Study Area.

	Scientific Name	Common Name	Federal/State Status Global/State Rank CDFW Status	Habitat Preference	Potential to Occur
				County. Dependent on dune lupine (Lupinus chamissonis).	
40.	*Rana boylii*	**Foothill Yellow-Legged Frog**	-/CCT G3/S3 SSC	Partly shaded, shallow streams and riffles with rocky substrate. Min. 15 weeks for larval development.	No. Suitable breeding and upland habitat is not available in the Study Area. Closest records is historic, approximately 7 miles north (CNDDB #2422).
41.	*Rana draytonii*	**California Red-Legged Frog**	FT/- G2G3/S2S3 SSC	Lowlands and foothills in or near sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks for larval development.	No. Suitable habitat is not available in the Study Area.
42.	*Spea hammondii*	**Western Spadefoot**	-/- G3/S3 SSC	Vernal pools in grassland and woodland habitats	No. Suitable habitat is not available in the Study Area.
43.	*Spinus lawrencei*	**Lawrence's goldfinch (Nesting)****	-/- G3G4/S3/S4 SA,BCC	Arid and open woodlands within near vicinity of chaparral or other brushy areas; tall annual weed fields; and a water source such as a stream, small lake, or farm pond. Live oaks (Quercus spp.) and blue oaks (Q. douglasii) are predominant trees where this species nests (Linsdale 1950, Coutlee 1968a)	Low. Marginally suitable nesting habitat is present in the oak woodland habitat onsite. This species is absent from Ebird records from nearby Nipomo Regional Park 2018-2020. Ebird range distribution map shows species' range in lower densities in coastal lowland areas. There are CNDDB records for this species, but not within the 8-quad search.
44.	*Sternula antillarum browni*	**California Least Tern**	FE/CE G4T2T3Q/S2 FP	Nests on sand beaches, alkali flats, bare flat ground from San Francisco Bay to N. Baja California. Colonial breeder.	No. Suitable habitat is not available in the Study Area.
45.	*Strix occidentalis occidentalis*	**California Spotted Owl**	-/- G3G4T2T3/S3 SSC	Most often found in deep-shaded canyons, on north-facing slopes, and within 300 meters of water.	No. Habitat unsuitable in the Study Area. Closest record is from 1974 and is located 6 miles northeast (CNDDB #97567).

	Scientific Name	Common Name	Federal/State Status Global/State Rank CDFW Status	Habitat Preference	Potential to Occur
46.	*Taricha torosa*	**Coast Range Newt**	-/- G4/S4 SSC	Lives in terrestrial habitats & will migrate over 1 km to breed in ponds, reservoirs & slow moving streams.	No. Suitable habitat is not available in the Study Area.
47.	*Taxidea taxus*	**American Badger**	-/- G5/S3 SSC	Needs friable soils in open ground with abundant food source such as California ground squirrels.	Present. Several dens observed; suitable grassland habitat and ground squirrels in the Study Area.
48.	*Thamnophis hammondii*	**Two-Striped Gartersnake**	-/- G4/S3S4 SSC	Coastal California from Salinas to Baja, sea level to 7000', aquatic, in or near permanent water, streams with rocky beds and riparian growth	No. Suitable habitat is not available in the Study Area.
49.	*Tryonia imitator*	**Mimic Tryonia (=California Brackishwater Snail)**	-/- G2/S2 SA	Inhabits coastal lagoons, estuaries, salt marshes from Sonoma to San Diego Counties.	No. Suitable habitat is not available in the Study Area.

Habitat characteristics are from the Jepson Manual and CNDDB.
*not listed in CNDDB or for the search area, but possibly for the location.
** not listed in CNDDB for the search area, but listed in IPaC..

Federal and State Status Abbreviations:

FE: Federally Endangered
FT: Federally Threatened
PE: Proposed Federally Endangered
PT: Proposed Federally Threatened
CE: California Endangered
CT: California Threatened
CCE: Candidate for California Endangered
CCT: Candidate for California Threatened

California Department of Fish and Wildlife Rank:

WL: Watch Lis
SSC: Species of Special Concern
FP: Fully Protected
SA: Special Animal

Global/State Ranks:

G1/S1 – Critically Imperiled
G2/S2 – Imperiled
G3/S3 – Vulnerable
G4/S4 – Apparently Secure
G5/S5 – Secure
Q – Element is very rare but there are taxonomic questions associated with it.
Range rank – (e.g., S2S3 means rank is somewhere between S2 and S3)
? – (e.g., S2? Means rank is more certain than S2S3 but less certain that S2)

APPENDIX E. USFWS IPAC RESOURCES LIST

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

San Luis Obispo County, California

Local office

Ventura Fish And Wildlife Office

(805) 644-1766
(805) 644-3958

2493 Portola Road, Suite B
Ventura, CA 93003-7726

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

Giant Kangaroo Rat Dipodomys ingens — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6051

Birds

NAME	STATUS

California Clapper Rail Rallus longirostris obsoletus — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/4240

California Condor Gymnogyps californianus — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/8193

California Least Tern Sterna antillarum browni — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/8104

Least Bell's Vireo Vireo bellii pusillus — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/5945

Marbled Murrelet Brachyramphus marmoratus — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/4467

Southwestern Willow Flycatcher Empidonax traillii extimus — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/6749

Western Snowy Plover Charadrius nivosus nivosus — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/8035

Reptiles

NAME	STATUS

Blunt-nosed Leopard Lizard Gambelia silus — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/625

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander Ambystoma californiense There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Tidewater Goby Eucyclogobius newberryi There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/57	Endangered

Insects

NAME	STATUS
Kern Primrose Sphinx Moth Euproserpinus euterpe There is **proposed** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/7881	Threatened

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp Branchinecta lynchi There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS
California Jewelflower Caulanthus californicus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4599	Endangered

Gambel's Watercress Rorippa gambellii — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/4201

La Graciosa Thistle Cirsium loncholepis — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/6547

Marsh Sandwort Arenaria paludicola — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/2229

Nipomo Mesa Lupine Lupinus nipomensis — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5480

Pismo Clarkia Clarkia speciosa ssp. immaculata — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5936

Salt Marsh Bird's-beak Cordylanthus maritimus ssp. maritimus — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6447

Spreading Navarretia Navarretia fossalis — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/1334

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Allen's Hummingbird Selasphorus sasin — Breeds Feb 1 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9637

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Rufous Hummingbird selasphorus rufus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Song Sparrow Melospiza melodia — Breeds Feb 20 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Spotted Towhee Pipilo maculatus clementae — Breeds Apr 15 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/4243

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▪)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

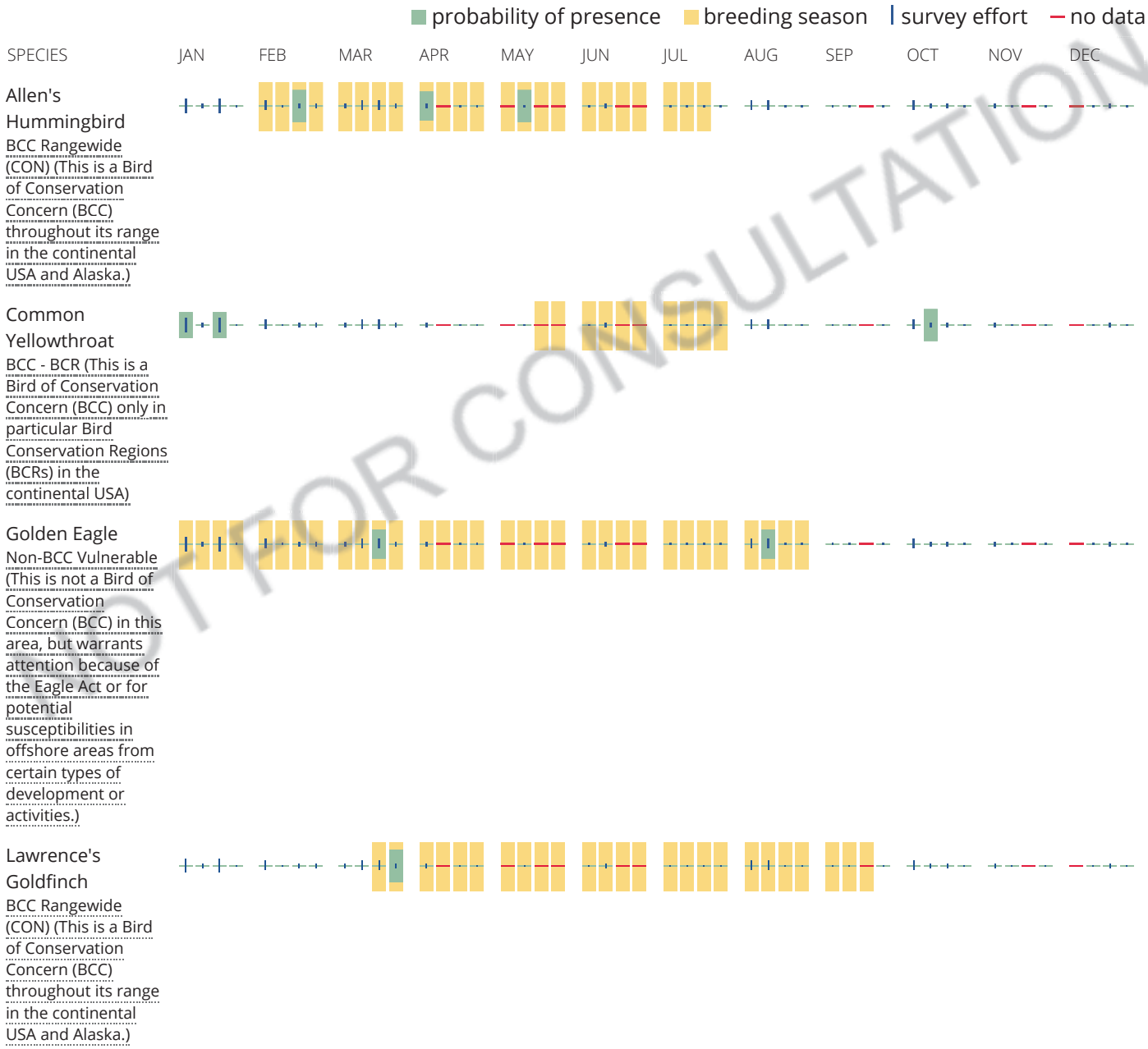
Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

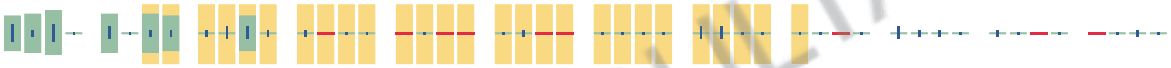


Nuttall's Woodpecker
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Oak Titmouse
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

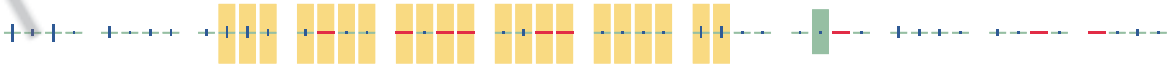
Rufous Hummingbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Song Sparrow
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Spotted Towhee
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Tricolored Blackbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Wrentit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and

avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird

impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

APPENDIX F. DANA RESERVE HISTORICAL AERIAL IMAGERY

Google Earth imagery indicates that the grassland west of Highway 101 was last farmed in about 2002, or possibly 2006. Aerial imagery from UC Santa Barbara's geography library and Google Earth imagery indicates that farming, mowing, and chaparral (brush) removal appears to have been conducted for decades.

The 1939 oldest image shows evidence of brush clearing on rolling topography and farmed fields on flatter terrain. The 1949 image indicates some of the brush cover and associated coast live oaks were starting to grow back. Some brush clearing is evidenced in 1957. The 1969 to 1994 aerials show chaparral cover generally increasing in areas not actively farmed. Between 1994 and 2002, shrub reduction appears to have reduced brush cover while retaining young trees barely visible in the 1994 imagery. The 2002 and subsequent years aerial images show reduced brush cover. Livestock pens are visible in 2011 to 2013 aerial imagery.

Google Earth Imagery:

2021 February 6
2018 August 11
2018 February 3
2017 June 15
2016 July 13
2015 January 5
2013 April 18
2012 May 18
2011 May 30
2010 April 24
2009 May 24
2007 June 30
2006 June 25
2006 April 27
2004 December 31
2004 June 30
2003 July 29
2002 May 10
1994 September 14

U.C. Santa Barbara's Geography Library:

1978 September 23 (UCSB file name: usda-40-06079_278-81_1978)
1969 June 29 (UCSB file name: axh-1969_2kk-205)
1960 July 12 (UCSB file name: ha-jg_l1)
1957 September 11 (AXH-26R-28 on photo; UCSB file name: axh-1956_26r-28)
1949 March 28 (USCB file name: axh-2949_2f-95)
1939 May 2 (UCSB file name: axh-1939-army_101-4)

2021 February 6 - Google Earth Imagery

2018 August 11 - Google Earth Imagery

2018 February 3 - Google Earth Imagery

2017 June 15 - Google Earth Imagery

2016 July 13 - Google Earth Imagery

2015 January 5 - Google Earth Imagery

2013 April 18 - Google Earth Imagery

2012 May 18 - Google Earth Imagery

2011 May 30 - Google Earth Imagery

2010 April 24 - Google Earth Imagery

2009 May 24 - Google Earth Imagery

2007 June 30 - Google Earth Imagery

2006 June 25 - Google Earth Imagery

2006 April 27 - Google Earth Imagery

2004 December 31 - Google Earth Imagery

2004 June 30 - Google Earth Imagery

2003 July 29 - Google Earth Imagery

2002 May 10 - Google Earth Imagery

1994 September 14 - Google Earth Imagery

1978 September 23 - UC Santa Barbara Imagery Library
UCSB file name usda-40-06079 278-81 1978

1969 June 29 - UC Santa Barbara Imagery Library
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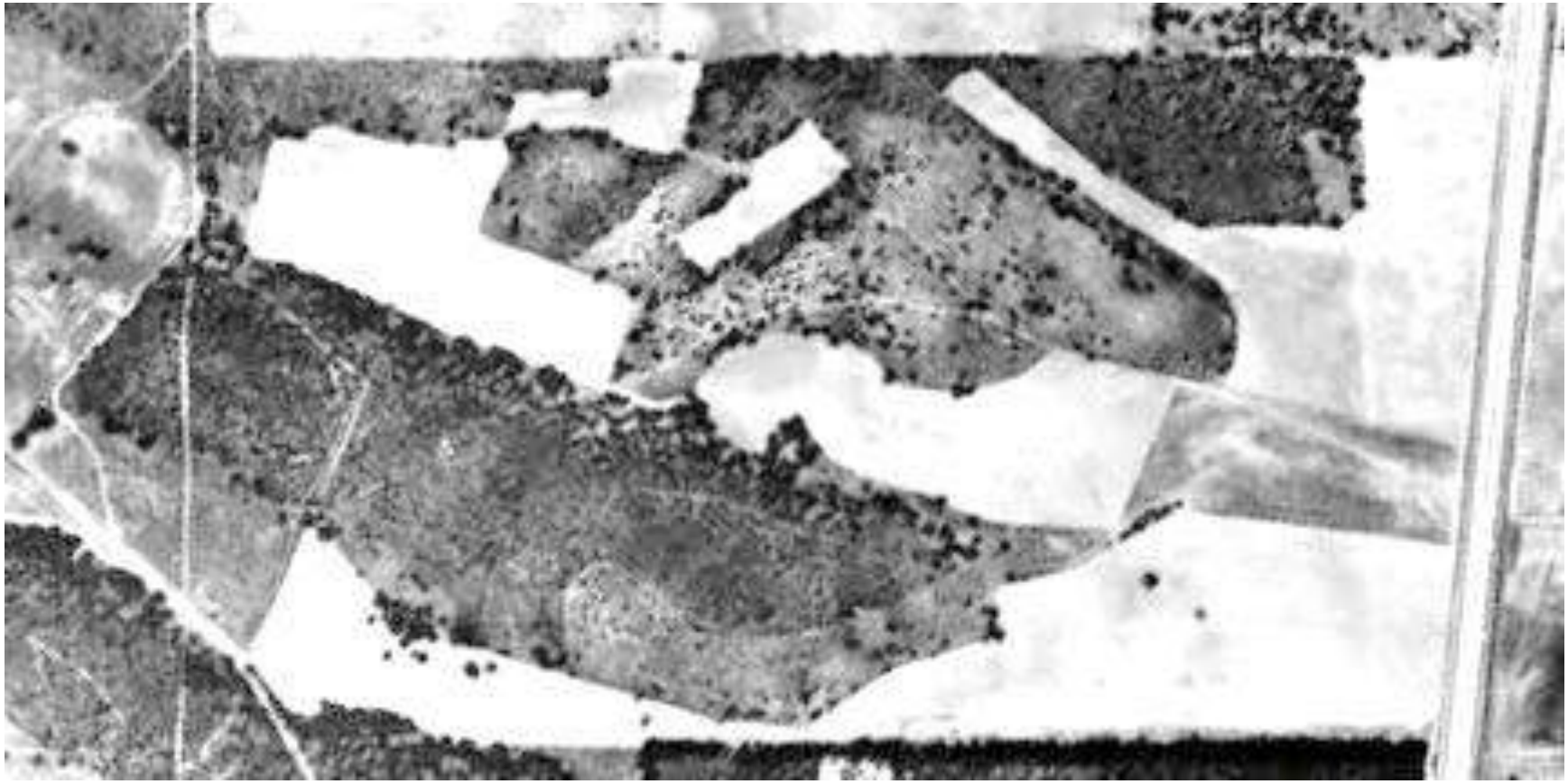

1960 July 12 - UC Santa Barbara Imagery Library
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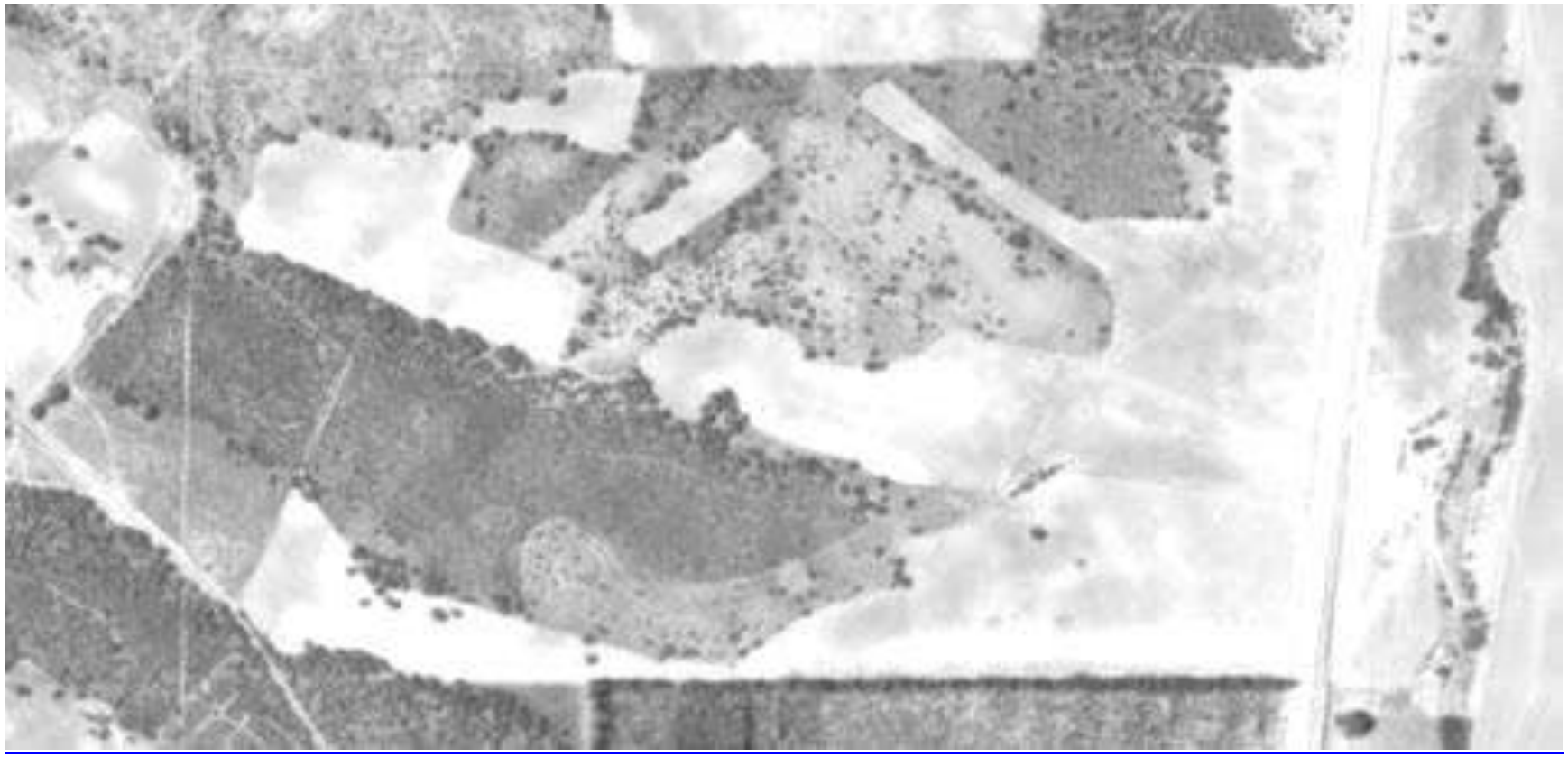

1957 September 11 - UC Santa Barbara Imagery Library
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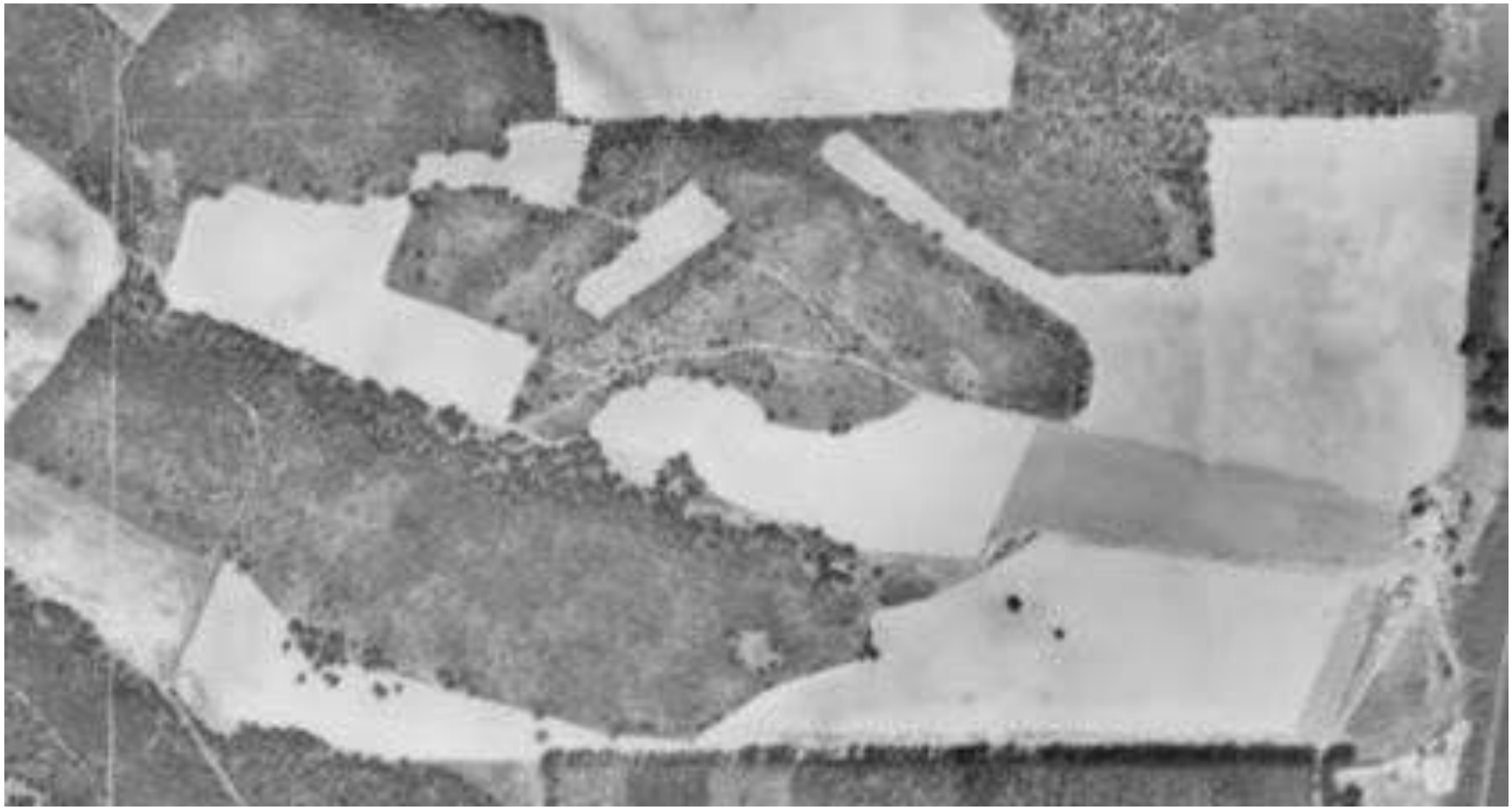
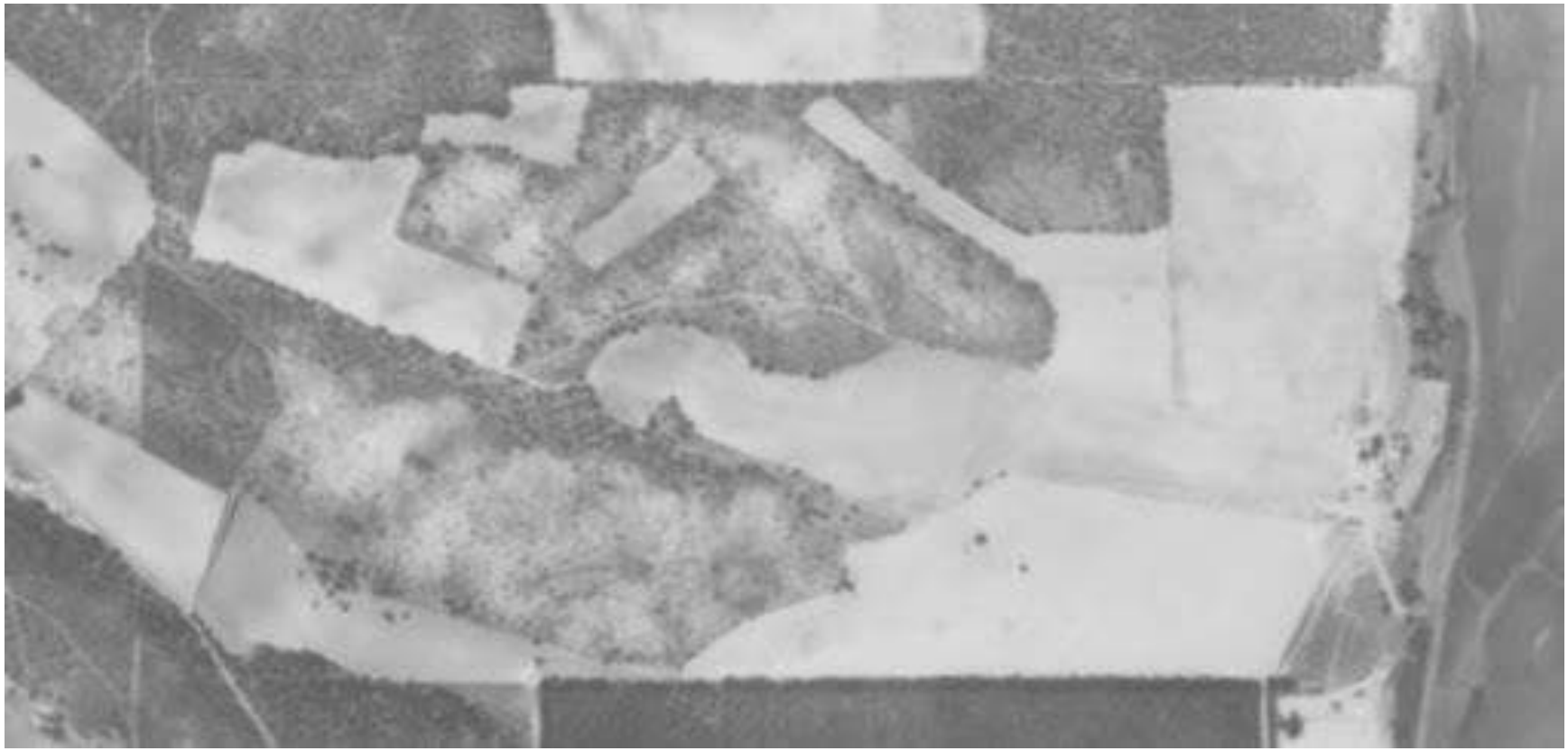


1949 March 28 - UC Santa Barbara Imagery Library
USCB file name axh-2949 2f-95



1939 May 2 - UC Santa Barbara Imagery Library
UCSB file name axh-1939-army 101-4

APPENDIX G. HABITAT DESCRIPTIONS FOR DANA RIDGE RANCH

APPENDIX G. HABITAT DESCRIPTIONS FOR DANA RIDGE RANCH

Dana Ridge Ranch is located 6.25 miles northeast of Dana Reserve (Figure 1, Figure 2). The property contains proposed offsite mitigation for oak habitats and individual trees. The 396-acre parcel contains 187.0 acres of coast live oak woodland, 67.5 acres of coast live oak forest, 95.9 acres of chamise chaparral, 19.2 acres of La Panza manzanita chaparral, and 26.4 acres of annual grassland (Figure 3). Elevations vary from 678 feet above sea level near Upper Los Berros Road to 1490 feet on a peak dominated by a rare manzanita (Figure 4). Plant and animal lists are provided after the figures.

1. Coast Live Oak Woodland

Coast live oak woodland habitat (*Quercus agrifolia* / *Adenostoma fasciculatum – Salvia mellifera* Alliance G3/S3) comprises approximately 187.0 acres and is the most common habitat on the Dana Ridge Ranch. Within the Study Area it occurs on a variety of slope aspects. Tree canopy is a mixture of open to closed and coast live oak comprises between 20-50 percent of tree canopy cover (Sawyer 2009). More open oak woodland areas are dominated by chaparral species in the canopy openings, particularly chamise (*Adenostoma fasciculatum*), but also black sage (*Salvia mellifera*), and, in certain areas, La Panza Manzanita (*Arctostaphylos pilosula*), a rare endemic shrub (Photo 1). While coast live oak woodland habitat on Dana Ridge Ranch does not support many of the rare species associated with Dana Reserve, it does provide undisturbed *Quercus agrifolia* / *Adenostoma fasciculatum – Salvia mellifera* habitat with the dominant species being found in both locations. Coast live oak woodland habitat also provides a contiguous wildlife corridor and suitable nesting habitat is present for many songbirds and raptors. Photo 1 shows open canopy coast live oak woodland habitat with adjacent chamise chaparral.

Photo 1. Open oak woodland habitat with chamise in openings, view north. April 22, 2021.

2. Coast Live Oak Forest

Coast live oak forest habitat (*Quercus agrifolia* / *Toxicodendron diversilobum* Alliance G5/S4) comprises approximately 67.5 acres and is the third most common habitat on the Dana Ridge Ranch. Within the Study Area it occurs on lower north facing slopes and is associated with several ephemeral drainages. Coast live oak tree canopy is generally contiguous (closed canopy) and provides more than 50 percent average cover in the tree canopy (Sawyer 2009; Photo 2). The understory in closed canopy areas is frequently dominated by poison oak (*Toxicodendron diversilobum*), coffeeberry (*Frangula californica*), snowberry (*Symphoricarpos mollis*), and a variety of herbaceous species (Photo 2). Coast live oak forest on Dana Ridge Ranch provides undisturbed oak habitat and shares many of its dominant shrub species with Dana Reserve. Coast live oak woodland provides relatively undisturbed wildlife habitat as well as a contiguous wildlife corridor. Suitable nesting habitat is present on the Dana Ridge Ranch for many songbirds and raptors. Photo 1 shows closed canopy in oak woodland.

Photo 2. Closed canopy oak woodland habitat with poison oak understory, view west. April 22, 2021.

3. Chamise Chaparral

Chamise chaparral habitat (*Adenostoma fasciculatum* Shrubland Alliance) comprises approximately 95.9 acres and is the second most common habitat on the Dana Ridge Ranch. It occurs across variable topography including mild to steep slopes. Chamise (*Adenostoma fasciculatum*) is the dominant shrub, with over 50 percent relative cover (Sawyer 2009, Photo 3). Shrub canopy is intermittent to continuous with scattered coast live oak trees. Associated species include coast live oak, black sage *(Salvia melifera),* La Panza manzanita (*Arctostaphylos pilosula*), toyon, poison oak, holly-leaf cherry (*Prunus ilicifolia*), and sticky monkey flower (*Diplacus aurantiacus*). The understory is frequently dominated by poison oak as well as herbaceous annuals and grasses.

La Panza manzanita is a special status species (California Rare Plant Rank 1B.2) that occurs as a frequent associate in the chamise chaparral of Dana Ridge Ranch, distributed across approximately 54 acres of chaparral habitat (Figure 4). This manzanita is known only from San Luis Obispo County and from one occurrence in southern Monterey County.

Chamise chaparral habitat on Dana Ridge Ranch provides relatively undisturbed high-quality wildlife habitat as well as a contiguous wildlife corridor.

Photo 3. Chamise chaparral habitat, view east. July 16, 2020.

4. La Pan□a Man□anita Chaparral Scrub □Provisional Alliance□

La Panza Manzanita Chaparral Scrub (*Arctostaphylo*s *pilosula* Provisional Shrubland Alliance) comprises approximately 19.2 acres on the Dana Ridge Ranch in south-central portions of the ranch. It occurs on variable topography with mild to moderate slopes. Within this shrubland community type, La Panza Manzanita is the dominant shrub, comprising over 75 percent relative cover with scattered patches of exposed soil or rock (Photo 4). This community type occurs on shale soils with leaf litter comprising most of the understory and generally has low species diversity. The few associate species observed included scattered bush poppy (*Dendromecon rigida*) and chamise. This habitat type does not conform to a described vegetation alliance (Sawyer 2009) and consequently is being suggested as a provisional alliance for the purposes of this habitat description.

The dominant species within this community type, La Panza manzanita, is a special status plant species with a CRPR of 1B.2 and although this habitat is not currently recognized as a CDFW Sensitive community, it may warrant consideration. La Panza manzanita chaparral on the Dana Ridge Ranch provides minimally disturbed high-quality wildlife habitat as well as a contiguous wildlife corridor. La Panza manzanita was beginning to set fruit in early April 2020 (Photo 5).

Photo 4. La Panza Manzanita Chaparral Habitat, view north. July 16, 2020.

Photo 5. La Panza manzanita beginning to set fruit. April 3, 2020

5. Annual Grassland

Annual grassland comprises approximately 26.4 acres within the southeastern (Photo 6) and north-central portions (Photo 7) of the Dana Ridge Ranch. The southeastern grassland is dominated by a mixture of non-native annual grasses (*Avena* spp. - *Bromus* spp. Herbaceous Semi-Natural Alliance) while the north-central portion contains an assemblage of both non-native annual grasses and a diversity of native herbaceous species. Associates in the annual grassland habitat include wild oats (*Avena barbata*), ripgut brome (*Bromus diandrus*), red brome (*Bromus rubens*), purple needle grass (*Stipa pulchra*), coast tarweed (*Madia sativa*), purple clarkia (*Clarkia purpurea*), fiddleneck species (*Amsinckia retrorsa* and *Amsinckia intermedia*), and cream cups (*Platystemon californicus*). Annual grassland occurs over variable topography with flat to steep slopes within the Study Area. A patch of paniculate tarweed (*Deinandra paniculata*), a CRPR 4.2 plant, occurs on disturbed dirt roadsides in the southern portion. Annual grassland provides nesting and foraging habitat for a variety of wildlife.

Photo 6. Annual grassland habitat on the south side of the property, view northwest. July 16, 2020.

Photo 7. Annual grassland habitat on north side of the property, view northeast. April 3, 2020.

DANA RIDGE RANCH FIGURES

- **Figure 1. Dana Ridge Ranch Vicinity Map**
- **Figure 2. Dana Ridge Ranch Aerial**
- **Figure 3. Dana Ridge Ranch Habitats**
- **Figure 4. La Pan□a Man□anita Extent**

Figure 1. Dana Ridge Ranch Vicinity Map

Dana Reserve

Dana Ridge Ranch

N

0 0.5 1 Mile

Dana Ridge Ranch
Map Center: 120.47069°W 35.05858°N
Nipomo, San Luis Obispo County

Imagery Date: July 2018

ALTHOUSE AND MEADE, INC.
BIOLOGICAL AND ENVIRONMENTAL SERVICES

Map Updated:
August 03, 2020 11:48 AM by JBB

Figure 2. Dana Ridge Ranch Aerial

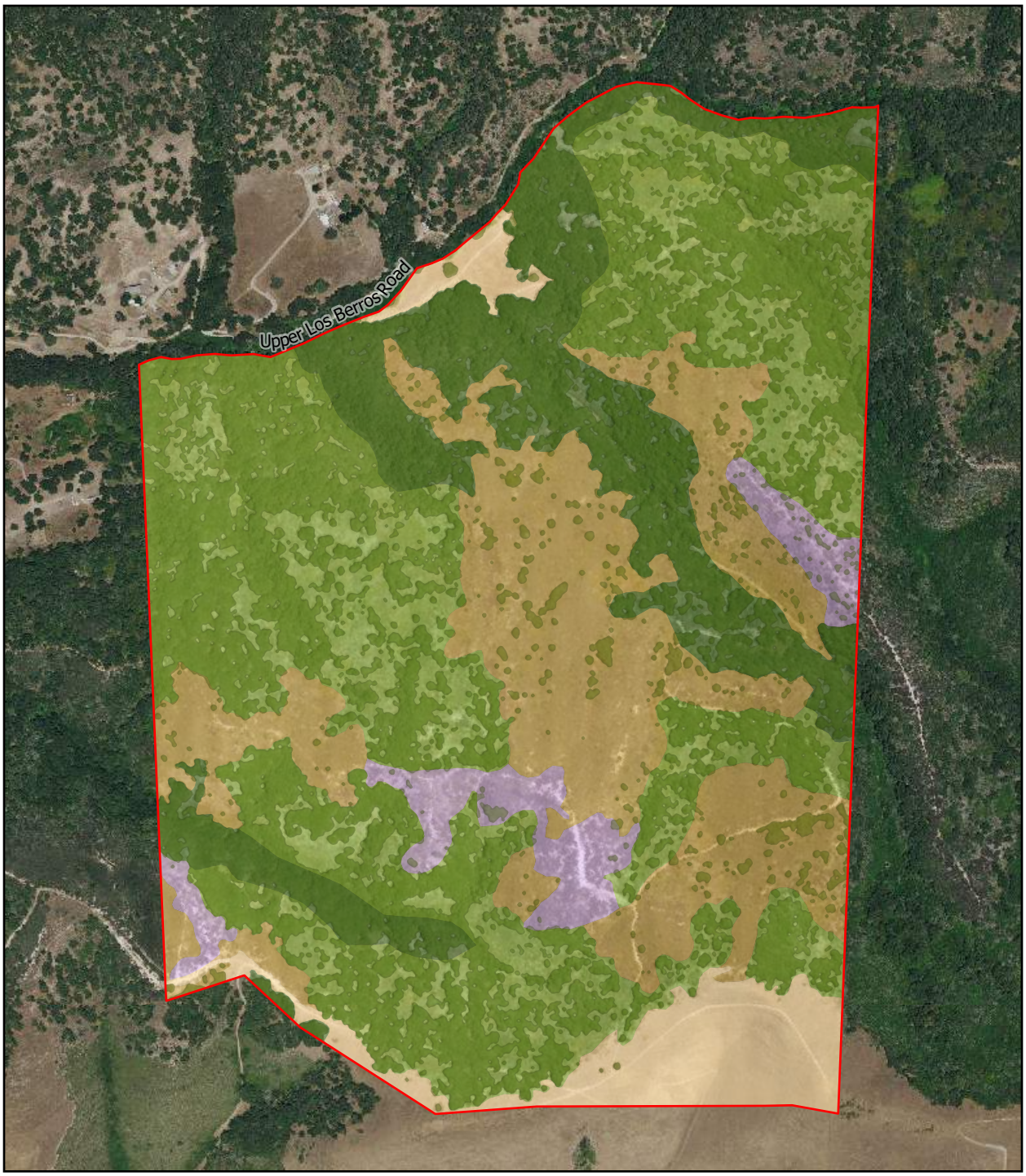
Parcel Boundary

0 500 1,000 Feet

Dana Ridge Ranch
Map Center: 120.43844°W 35.07224°N
Nipomo, San Luis Obispo County

Imagery Date: 07/16/2020

Figure 3. Dana Ridge Ranch Habitats



Legend

- Property Boundary (396.1 ac)
- Coast Live Oak Canopy (176.0 ac)

Habitats

- Coast Live Oak Woodland (187.0 ac)
- Coast Live Oak Forest (67.5 ac)
- La Panza Manzanita Chaparral (19.2 ac)
- Chamise Chaparral (95.9 ac)
- Annual Grassland (26.4 ac)

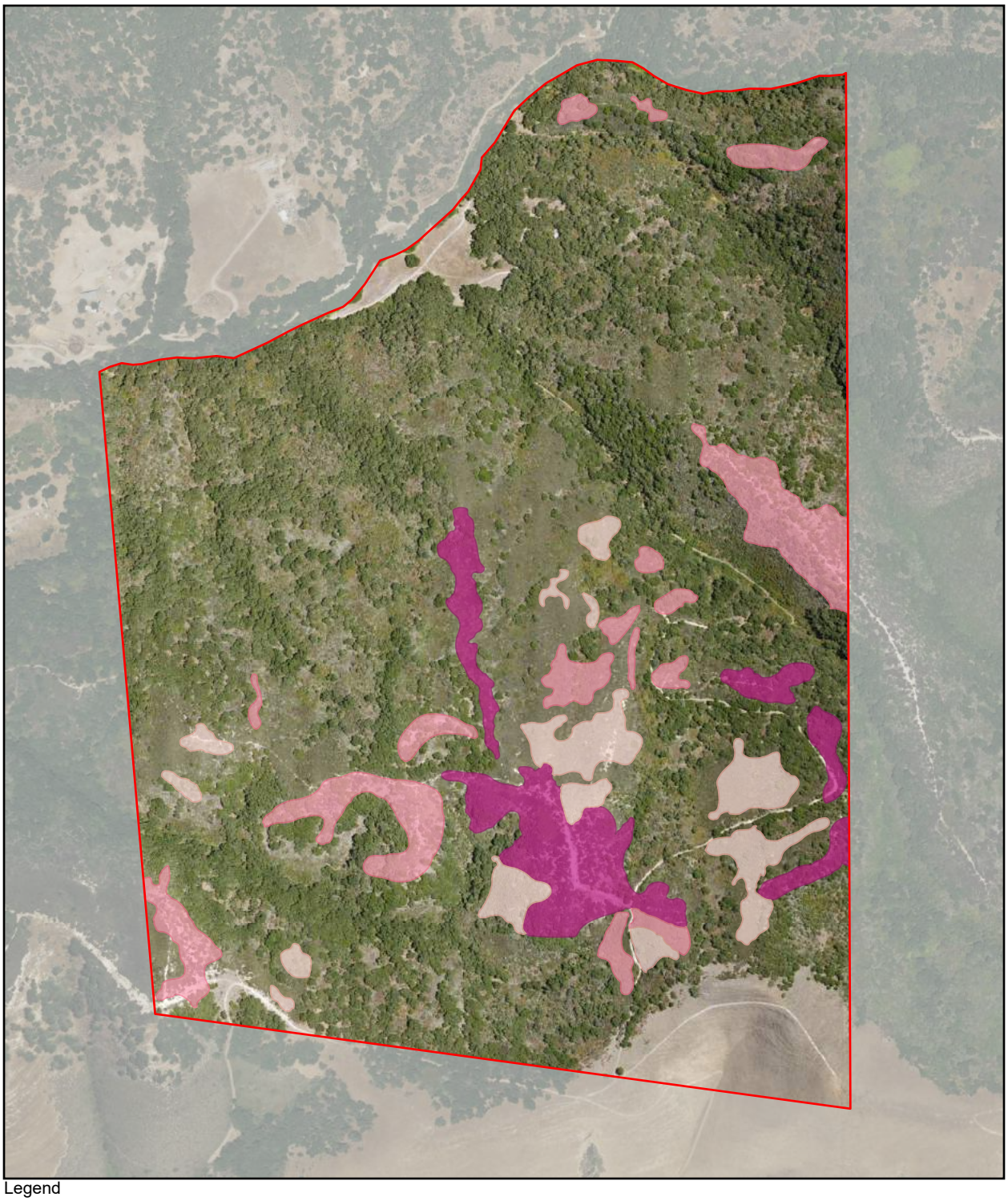
N

0 500 1,000 Feet

Dana Ridge Ranch
Map Center: 120.43865°W 35.07217°N
Nipomo, San Luis Obispo County

Imagery Source: Althouse and Meade, 2020

Figure 4. *Arctostaphylos pilosula* (1B.2) Extent



Legend

Parcel Boundary

Arctostaphylos pilosula Density

- High (17.8 ac)
- Medium (21.9 ac)
- Low (13.9 ac)

0 500 1,000 Feet

Dana Ridge Ranch
Map Center: 120.43859°W 35.072°N
Nipomo, San Luis Obispo County

Imagery Date: 07/16/2020

DANA RIDGE RANCH PRELIMINARY PLANT LIST

This list is compiled from site visits conducted from summer 2020 till Spring 2021. Dave Keil, Adam Searcy, LynneDee Althouse, Kyle Nessen, and Sarah Termondt contributed to this botanical survey. The list includes 215 plant species, of which 172 are native (80%) and 43 are introduced (20%). Three special status species were detected.

Scientific Name	Common Name	Origin	Special Status
Ferns - 5 Species			
Adiantum jordanii	Maidenhair fern	Native	None
Dryopteris arguta	Wood fern	Native	None
Pellaea andromedifolia	Coffee fern	Native	None
Pentagramma triangularis	Gold back fern	Native	None
Polypodium californicum	California polypody	Native	None
Trees – 6 Species			
Notholithocarpus densiflorus	Tanoak	Native	None
Prunus ilicifolia	Holly leaf cherry	Native	None
Quercus agrifolia	Coast live oak	Native	None
Quercus berberidifolia	Scrub oak	Native	None
Quercus lobata	Valley oak	Native	None
Salix lasiolepis	Arroyo willow	Native	None
Shrubs – 32 Species			
Adenostoma fasciculatum var. *fasciculatum*	Chamise	Native	None
Amorpha californica var. *californica*	False indigo	Native	None
Arctostaphylos glandulosa	Eastwood manzanita	Native	None
Arctostaphylos pilosula	La Panza manzanita	Native	CRPR 1B.2
Artemisia californica	Coastal sagebrush	Native	None

Scientific Name	Common Name	Origin	Special Status
Baccharis pilularis subsp. *consanguinea*	Coyote brush	Native	None
Ceanothus cuneatus var. *cuneatus*	Buck brush	Native	None
Ceanothus papillosus	Wartleaf ceanothus	Native	None
Cercocarpus betuloides var. *betuloides*	Mountain mahogany	Native	None
Cornus sericea subsp. *occidentalis*	Western dogwood	Native	None
Dendromecon rigida	Bush poppy	Native	None
Diplacus aurantiacus	Sticky monkeyflower	Native	None
Eriophyllum confertiflorum var. *confertiflorum*	Golden yarrow	Native	None
Frangula californica subsp. *californica*	Coffeeberry	Native	None
Garrya veatchii	Southern silk tassel	Native	None
Hazardia squarrosa var. *squarrosa*	Saw-toothed goldenbush	Native	None
Heteromeles arbutifolia	Toyon	Native	None
Holodiscus discolor var. *discolor*	Ocean spray	Native	None
Keckiella cordifolia	Heart-leaved penstemon	Native	None
Lupinus albifrons	Bush lupine	Native	None
Oemleria cerasiformis	Oso berry	Native	None
Phoradendron leucarpum subsp. *tomentosum*	Mistletoe	Native	None
Rhamnus crocea	Redberry	Native	None
Ribes californicum var. *californicum*	Hillside gooseberry	Native	None
Ribes malvaceum var. *malvaceum*	Chaparral currant	Native	None
Ribes speciosum	Fuschia-flowered gooseberry	Native	None
Rosa californica	California rose	Native	None
Rubus ursinus	California blackberry	Native	None

Scientific Name	Common Name	Origin	Special Status
Salvia mellifera	Black sage	Native	None
Sambucus nigra subsp. *caerulea*	Blue elderberry	Native	None
Symphoricarpos mollis	Creeping snowberry	Native	None
Toxicodendron diversilobum	Poison oak	Native	None
Forbs – 149 Species			
Acmispon americanus var. *americanus*	Spanish clover	Native	None
Acmispon glaber var. *glaber*	Deerweed	Native	None
Acmispon junceus var. *biolettii*	Rush lotus	Native	None
Acmispon maritimus var. *maritimus*	Coastal lotus	Native	None
Acmispon parviflorus	Hill lotus	Native	None
Acmispon strigosus	Bishop lotus	Native	None
Acmispon wrangelianus	California lotus	Native	None
Acourtia microcephala	Perezia	Native	None
Agastache urticifolia	Horse mint	Native	None
Agoseris grandiflora var. *grandiflora*	Giant mountain dandelion	Native	None
Agoseris heterophylla var. *heterophylla*	Annual mountain dandelion	Native	None
Amsinckia intermedia	Common fiddleneck	Native	None
Amsinckia retrorsa	Rigid fiddleneck	Native	None
Amsinckia tessellata var. *tessellata*	Bristly fiddleneck	Native	None
Anthriscus caucalis	Bur-chevil	Introduced	None
Aphanes occidentalis	Lady's-mantle	Native	None
Apiastrum angustifolium	Mock parsley, wild celery	Native	None
Artemisia douglasiana	Mugwort	Native	None

Scientific Name	Common Name	Origin	Special Status
Asclepias eriocarpa	Indian milkweed	Native	None
Asclepias fascicularis	Narrow-leaved milkweed	Native	None
Athysanus pusillus	Common sandweed	Native	None
Bowlesia incana	Bowlesia	Native	None
Brassica nigra	Black mustard	Introduced	None
Calandrinia menziesii	Red maids	Native	CRPR 4.3
Calochortus albus	Fairy lantern	Native	None
Calochortus clavatus var. *clavatus*	Club-haired mariposa lily	Native	None
Calochortus splendens	Splendid mariposa lily	Native	None
Calystegia macrostegia subsp. *cyclostegia*	Morning glory	Native	None
Capsella bursa-pastoris	Shepherd's purse	Introduced	None
Cardamine californica	Milk maids	Native	None
Cardamine oligosperma	Bitter-cress	Native	None
Carduus pycnocephalus subsp. *pycnocephalus*	Italian thistle	Introduced	None
Castilleja affinis subsp. *affinis*	Indian paintbrush	Native	None
Castilleja attenuata	Slender owl's clover	Native	None
Castilleja exserta	Owl's clover	Native	None
Centaurea benedicta	Blessed thistle	Introduced	None
Centaurea melitensis	Tocolote	Introduced	None
Chenopodium californicum	Pigweed	Native	None
Chlorogalum pomeridianum	Amole	Native	None
Clarkia bottae	Punch bowl godetia	Native	None
Clarkia purpurea subsp. *viminea*	Wine cups	Native	None

Scientific Name	Common Name	Origin	Special Status
Clarkia unguiculata	Elegant clarkia	Native	None
Claytonia parviflora subsp. *parviflora*	Miner's lettuce	Native	None
Claytonia perfoliata subsp. *mexicana*	Southern miner's lettuce	Native	None
Claytonia perfoliata subsp. *perfoliata*	Miner's lettuce	Native	None
Clematis lasiantha	Pipestems	Native	None
Clematis ligusticifolia	Virgin's bower	Native	None
Clinopodium douglasii	Yerba buena	Native	None
Collinsia heterophylla	Chinese houses	Native	None
Conium maculatum	Poison hemlock	Introduced	None
Corethrogyne filaginifolia	California aster	Native	None
Crassula connata	Pygmyweed	Native	None
Croton setiger	Doveweed	Native	None
Cryptantha sp.	Cryptantha sp.	Native	None
Cuscuta subinclusa	Canyon dodder	Native	None
Deinandra paniculata	Paniculate tarplant	Native	CRPR 4.2
Drymocallis glandulosa var. *wrangelliana*	Sticky cinquefoil	Native	None
Eleocharis montevidensis	Montevideo spike rush	Native	None
Epilobium canum subsp. *canum*	California fuschia	Native	None
Eriogonum cithariforme	Cithara buckwheat	Native	None
Eriogonum elongatum var. *elongatum*	Elongate buckwheat	Native	None
Erodium cicutarium	Redstem filaree	Introduced	None
Erodium moschatum	Filaree	Introduced	None
Eschscholzia californica	California poppy	Native	None

Scientific Name	Common Name	Origin	Special Status
Eucrypta chrysanthemifolia var. *chrysanthemifolia*	Common eucrypta	Native	None
Euphorbia peplus	Petty spurge	Introduced	None
Foeniculum vulgare	Fennel	Introduced	None
Fritillaria biflora var. *biflora*	Chocolate lily	Native	None
Galium andrewsii	Phlox-leaved bedstraw	Native	None
Galium aparine	Goose grass	Native	None
Galium californicum	California bedstraw	Native	None
Gamochaeta ustulata	Featherweed	Native	None
Geranium molle	Geranium	Introduced	None
Gilia clivorum	Blue-spot gilia	Native	None
Herniaria hirsuta	Rupturewort	Introduced	None
Hesperocnide tenella	Western stinging nettle	Native	None
Hoita orbicularis	Creeping leather root	Native	None
Juncus patens	Spreading rush	Native	None
Lactuca serriola	Prickly lettuce	Introduced	None
Lagophylla ramossissima	Slender hareleaf	Native	None
Lamium amplexicaule	Henbit	Introduced	None
Lathyrus vestitus var. *vestitus*	Common pacific pea	Native	None
Lepidium nitidum	Pepperwort	Native	None
Leptosiphon parviflorus	Variable linanthus	Native	None
Lithophragma cymbalaria	Woodland star	Native	None
Logfia filaginoides	California cottonrose	Native	None
Lomatium utriculatum	Lomatium	Native	None

Scientific Name	Common Name	Origin	Special Status
Lupinus bicolor	Miniature lupine	Native	None
Lupinus nanus	Sky blue lupine	Native	None
Lupinus succulentus	Arroyo lupine	Native	None
Lupinus truncatus	Lupine	Native	None
Madia gracilis	Slender madia	Native	None
Madia sativa	Coast tarweed	Native	None
Malva parviflora	Cheeseweed	Introduced	None
Marah fabacea	California man-root	Native	None
Microsteris gracilis	Slender phlox	Native	None
Monardella villosa subsp. *obispoensis*	Coyote mint	Native	None
Nemophila menziesii var. *menziesii*	Baby blue-eyes	Native	None
Nemophila pedunculata	Meadow nemophila	Native	None
Osmorhiza brachypoda	California sweet cicely	Native	None
Oxalis pes-caprae	Bermuda buttercup	Introduced	None
Paeonia californica	California peony	Native	None
Pedicularis densiflora	Little Indian warrior	Native	None
Phacelia cicutaria var. *hispida*	Caterpillar phacelia	Native	None
Pholistoma auritum var. *auritum*	Fiesta flower	Native	None
Plagiobothrys canescens var. *canescens*	Valley popcornflower	Native	None
Plagiobothrys nothofulvus	Popcorn flower	Native	None
Plantago lanceolata	English plantain	Introduced	None
Platystemon californicus	Cream cups	Native	None
Plectritis macrocera/congesta	Seablush sp.	Native	None

Scientific Name	Common Name	Origin	Special Status
Pseudognaphalium beneolens	Cudweed	Native	None
Pseudognaphalium californicum	California everlasting	Native	None
Pseudognaphalium microcephalum	Wright's cudweed	Native	None
Psilocarphus tenellus	Woolly marbles	Native	None
Rafinesquia californica	California chicory	Native	None
Ranunculus californicus var. *californicus*	California buttercup	Native	None
Ranunculus hebecarpus	Annual buttercup	Native	None
Rumex crispus	Curly dock	Introduced	None
Rupertia physodes	Common rupertia	Native	None
Salvia columbariae	Chia sage	Native	None
Salvia spathacea	Hummingbird sage	Native	None
Sanicula crassicaulis	Sanicle	Native	None
Scrophularia californica subsp. *californica*	California figwort	Native	None
Scutellaria tuberosa	Skullcap	Native	None
Silybum marianum	Milk thistle	Introduced	None
Sisymbrium officinale	Hedge mustard	Introduced	None
Solanum xanti	Nightshade	Native	None
Spergula arvensis	Stickwort	Introduced	None
Spergularia rubra	Red sand spurrey	Introduced	None
Stachys bullata	Hedge nettle	Native	None
Stellaria media	Chickweed	Introduced	None
Stellaria nitens	Chickweed	Native	None
Stellaria pallida	Pale starwort	Introduced	None

Scientific Name	Common Name	Origin	Special Status
Stephanomeria sp.	Wire lettuce	Native	None
Taraxacum officinale	Dandelion	Introduced	None
Tauschia hartwegii	Hartweg's umbrellawort	Native	None
Thysanocarpus laciniatus	Lacepod	Native	None
Toxicoscordion fremontii	Death camas	Native	None
Trifolium bifidum var. *decipiens*	Notch leaf clover	Native	None
Trifolium ciliolatum	Foothill clover	Native	None
Trifolium hirtum	Rose clover	Introduced	None
Trifolium microcephalum	Miniature clover	Native	None
Trifolium variegatum	Variegated clover	Native	None
Trifolium willdenovii	Tomcat clover	Native	None
Tropidocarpum gracile	Dobiepod	Native	None
Uropappus lindleyi	Silver puffs	Native	None
Verbena lasiostachys var. *lasiostachys*	Verbena	Native	None
Vicia hassei	Hasse's vetch	Native	None
Yabea microcarpa	Hedge parsley	Native	None
Grasses – 23 Species			
Aira caryophyllea	Silver European hairgrass	Introduced	None
Avena barbata	Slender wild oat	Introduced	None
Avena fatua	Wild oat	Introduced	None
Bromus diandrus	Ripgut brome	Introduced	None
Bromus hordeaceus	Soft chess brome	Introduced	None
Bromus madritensis	Foxtail chess, foxtail brome	Introduced	None

Scientific Name	Common Name	Origin	Special Status
Bromus rubens	Red top brome	Introduced	None
Bromus sitchensis	Sitka brome	Native	None
Ehrharta calycina	Veldt grass	Introduced	None
Elymus condensatus	Giant wild rye	Native	None
Elymus glaucus subsp. *glaucus*	Blue wildrye	Native	None
Elymus multisetus	Big squirreltail grass	Native	None
Festuca bromoides	Brome fescue	Introduced	None
Festuca microstachys	Annual fescue	Native	None
Festuca myuros	Rattail sixweeks grass	Introduced	None
Festuca perennis	Italian rye grass	Introduced	None
Hordeum murinum subsp. *leporinum*	Foxtail barley	Introduced	None
Hordeum vulgare	Barley	Introduced	None
Melica imperfecta	Melic	Native	None
Phalaris aquatica	Harding grass	Introduced	None
Poa infirma	Weak blue grass	Introduced	None
Stipa miliacea var. *miliacea*	Smilo grass	Introduced	None
Stipa pulchra	Purple needlegrass	Native	None

DANA RIDGE RANCH PRELIMINARY ANIMAL LIST

This list is compiled from site visits conducted from summer 2020 till Spring 2021. Adam Searcy, LynneDee Althouse, Kyle Nessen, and Sarah Termondt contributed to this animal survey. This list includes 72 native species (84%) and 14 introduced species (16%). Seven special status species were detected.

Scientific Name	Common Name	Origin	Special Status
Amphibians - 1 Species			
Batrachoseps nigriventris	Black-bellied Slender Salamander	Native	None
Reptiles – 1 Species			
Pituophis catenifer	Gopher Snake	Native	None
Sceloporus occidentalis bocourtii	Coast Range Fence Lizard	Native	None
Mammals – 10 Species			
Lynx rufus	Bobcat	Native	None
Neotamias merriami	Merriam's Chipmunk	Native	None
Neotoma sp.	Woodrat sp.	Native	None
Odocoileus hemionus	Mule Deer	Native	None
Sciurus griseus	Western Gray Squirrel	Native	None
Sus scrofa	Wild Boar	Introduced	None
Thomomys bottae	Valley Pocket Gopher	Native	None
Birds – 73 Species			
Aeronautes saxatilis	White-throated Swift	Native	None
Ammodramus savannarum	Grasshopper Sparrow	Native	SSC (nesting)
Aphelocoma californica	California Scrub-jay	Native	None
Baeolophus inornatus	Oak Titmouse	Native	None
Bubo virginianus	Great Horned Owl	Native	None

Scientific Name	Common Name	Origin	Special Status
Buteo jamaicensis	Red-tailed Hawk	Native	None
Buteo lineatus	Red-shouldered Hawk	Native	None
Buteo swainsoni	Swainson's Hawk	Native	ST
Callipepla californica	California Quail	Native	None
Calypte anna	Anna’s Hummingbird	Native	None
Cathartes aura	Turkey Vulture	Native	None
Catharus guttatus	Hermit Thrush	Native	None
Catharus ustulatus	Swainson's Thrush	Native	None
Chaetura vauxi	Vaux's Swift	Native	SSC (nesting)
Chamaea fasciata	Wrentit	Native	None
Chondestes grammacus	Lark Sparrow	Native	None
Colaptes auratus	Northern Flicker	Native	None
Contopus sordidulus	Western Wood Pewee	Native	None
Corvus brachyrhynchos	American Crow	Native	None
Corvus corax	Common Raven	Native	None
Cyanocitta stelleri	Steller's Jay	Native	None
Empidonax difficilis	Pacific-slope Flycatcher	Native	None
Eremophila alpestris actia	California Horned Lark	Native	Special Animal (nesting)
Falco sparverius	American Kestrel	Native	None
Haemorhous mexicanus	House Finch	Native	None
Haemorhous purpureus	Purple Finch	Native	None
Icterus bullockii	Bullock's Oriole	Native	None
Junco hyemalis	Dark-eyed Junco	Native	None

Scientific Name	Common Name	Origin	Special Status
Melanerpes formicivorus	Acorn Woodpecker	Native	None
Meleagris gallopavo	Wild Turkey	Native	None
Melospiza lincolnii	Lincoln's Sparrow	Native	None
Melospiza melodia	Song Sparrow	Native	None
Melozone crissalis	California Towhee	Native	None
Myiarchus cinerascens	Ash-throated Flycatcher	Native	None
Oreothlypis celata	Orange-crowned warbler	Native	None
Passerina amoena	Lazuli Bunting	Native	None
Passerina caerulea	Blue Grosbeak	Native	None
Patagioenas fasciata	Band-tailed Pigeon	Native	None
Petrochelidon pyrrhonota	Cliff Swallow	Native	None
Phainopepla nitens	Phainopepla	Native	None
Pheucticus melanocephalus	Black-headed Grosbeak	Native	None
Pica nuttalli	Yellow-billed Magpie	Native	Special Animal (nesting and communal roosts)
Picoides nuttallii	Nuttall's Woodpecker	Native	None
Picoides pubescens	Downy Woodpecker	Native	None
Picoides villosus	Hairy Woodpecker	Native	None
Pipilo maculatus	Spotted Towhee	Native	None
Polioptila caerulea	Blue-gray gnatcatcher	Native	None
Psaltriparus minimus	Bushtit	Native	None
Regulus calendula	Ruby-crowned Kinglet	Native	None
Sayornis nigricans	Black Phoebe	Native	None
Selasphorus sasin	Allen's hummingbird	Native	None

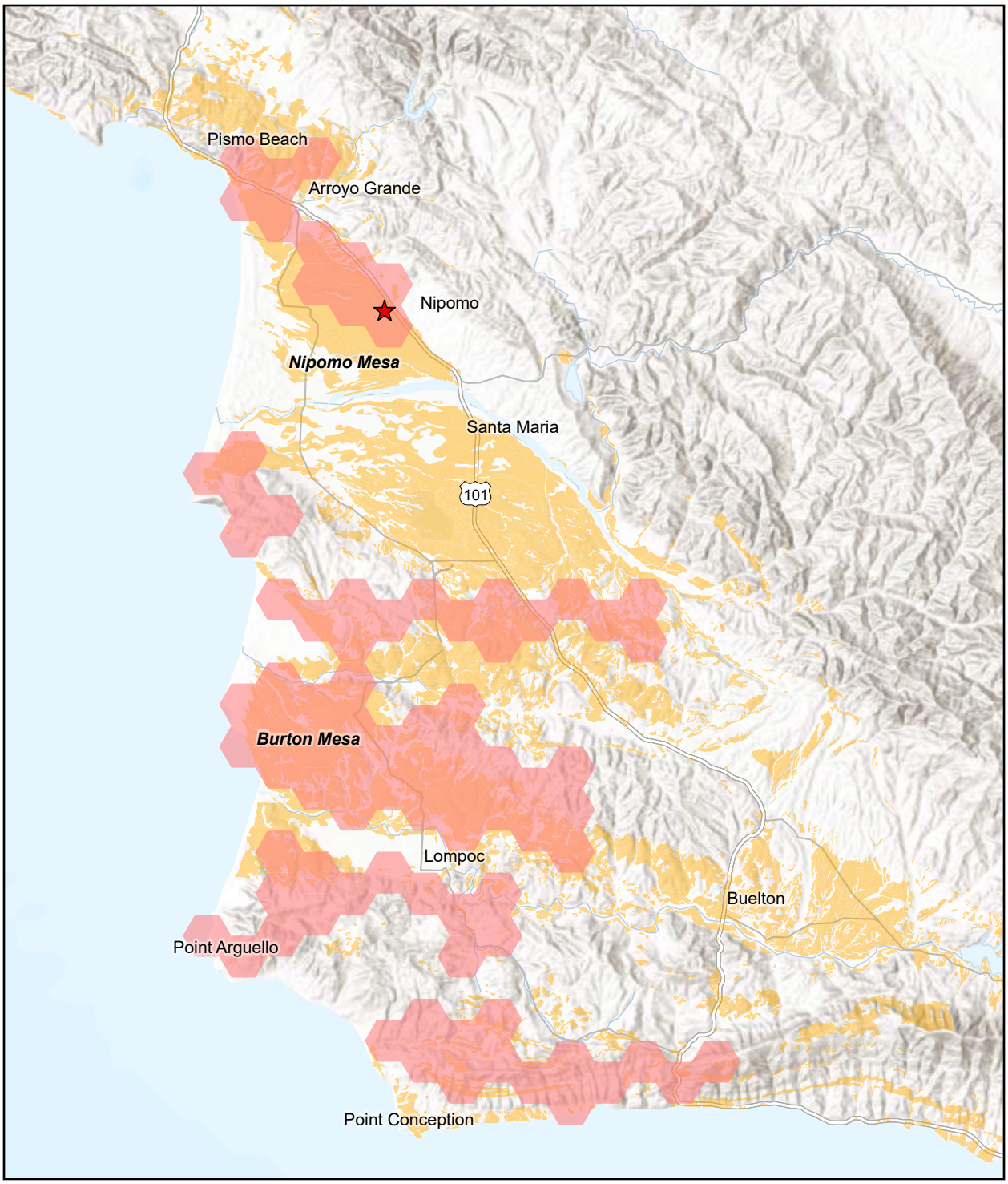
Scientific Name	Common Name	Origin	Special Status
Setophaga coronata	Yellow-rumped Warbler	Native	None
Setophaga nigrescens	Black-throated Gray Warbler	Native	None
Setophaga petechia	Yellow Warbler	Native	SSC (nesting)
Setophaga townsendii	Townsend's Warbler	Native	None
Sitta carolinensis	White-breasted Nuthatch	Native	None
Spinus lawrencei	Lawrence's Goldfinch	Native	Special Animal (nesting)
Spinus pinus	Pine Siskin	Native	None
Spinus psaltria	Lesser Goldfinch	Native	None
Streptopelia decaocto	Eurasian Collared Dove	Native	None
Tachycineta bicolor	Tree Swallow	Native	None
Tachycineta thalassina	Violet-green Swallow	Native	None
Thryomanes bewickii	Bewick’s Wren	Native	None
Toxostoma redivivum	California Thrasher	Native	None
Troglodytes aedon	House Wren	Native	None
Turdus migratorius	American Robin	Native	None
Vireo gilvus	Warbling Vireo	Native	None
Vireo huttonii	Hutton's Vireo	Native	None
Wilsonia pusilla	Wilson's Warbler	Native	None
Wilsonia pusilla	Wilson's Warbler	Native	None
Zenaida macroura	Mourning Dove	Native	None
Zonotrichia albicollis	White-throated Sparrow	Native	None
Zonotrichia atricapilla	Golden-crowned Sparrow	Native	None

APPENDIX H. POTENTIAL MITIGATION SITES FOR BURTON MESA CHAPARRAL

To estimate extent of Burton Mesa chaparral (BMC), we generated a 10 square kilometer hexagonal grid over southern San Luis Obispo County and western Santa Barbara County. We gathered occurrence records of *Arctostaphylos rudis* and *Arctostaphylos purissima*, the diagnostic species that determine BMC, from the California Natural Diversity Database (CNDDB 2021b) and the California Consortium of Herbaria (CCH 2021). If an occurrence record fell within a hexagonal grid, we considered that area part of Burton Mesa chaparral extent. We removed some hexagons based on old or poorly georeferenced occurrences.

We then assessed potential to support BMC in parcels greater than 10-acres in size that at least partially fell within the mapped extent. We used soil conditions, proximity to known occurrences, presence of oak woodland or chaparral in current imagery, and level of anthropogenic disturbance to determine BMC potential. Our map is intended to be a preliminary exploration of potential mitigation for BMC. We have not contacted any parcel owners or conducted any botanical surveys to verify BMC presence or quality.

Observed Extent of Burton Mesa Chaparral Indicator Species



Legend

- Dana Reserve
- Observed Extent (Hex Cell - 10 sq km)
- Sandy Soils

N

0 2.5 5 10 Miles

Dana Reserve
Map Center: 120.39061°W 34.84269°N
Nipomo, San Luis Obispo County

Data Sources: CNDDB, CCH, SSURGO

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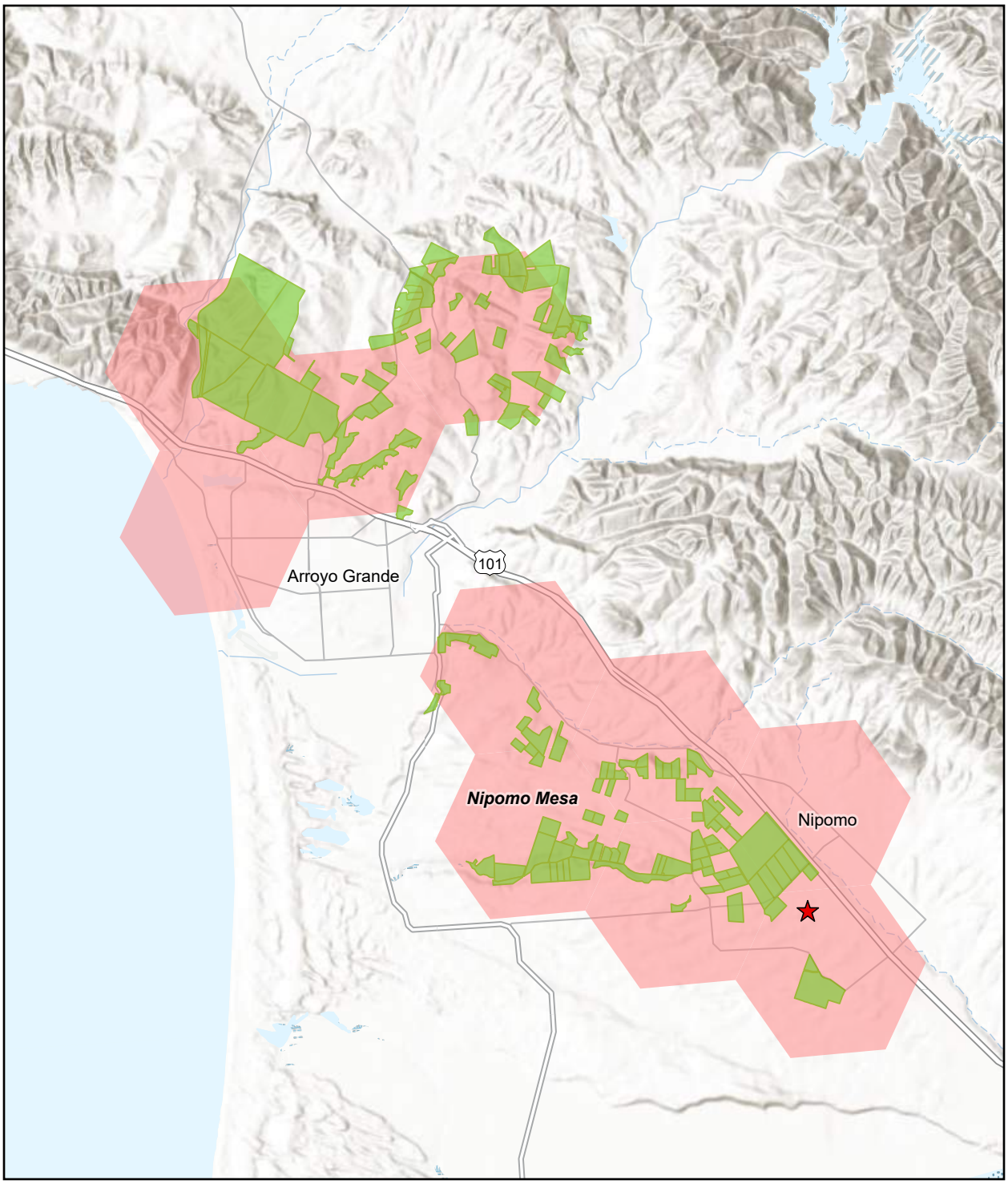
Map Created:
October 12, 2021 12:52 PM by KRN

Potential Mitigation Parcels - SLO County



Legend

- Dana Reserve
- Potential Mitigation Parcel
- Observed Burton Mesa Chaparral Extent

N

0 0.5 1 2 Miles

Dana Reserve
Map Center: 120.56597°W 35.10847°N
Nipomo, San Luis Obispo County

Data Sources: CNDDB, CCH, SSURGO

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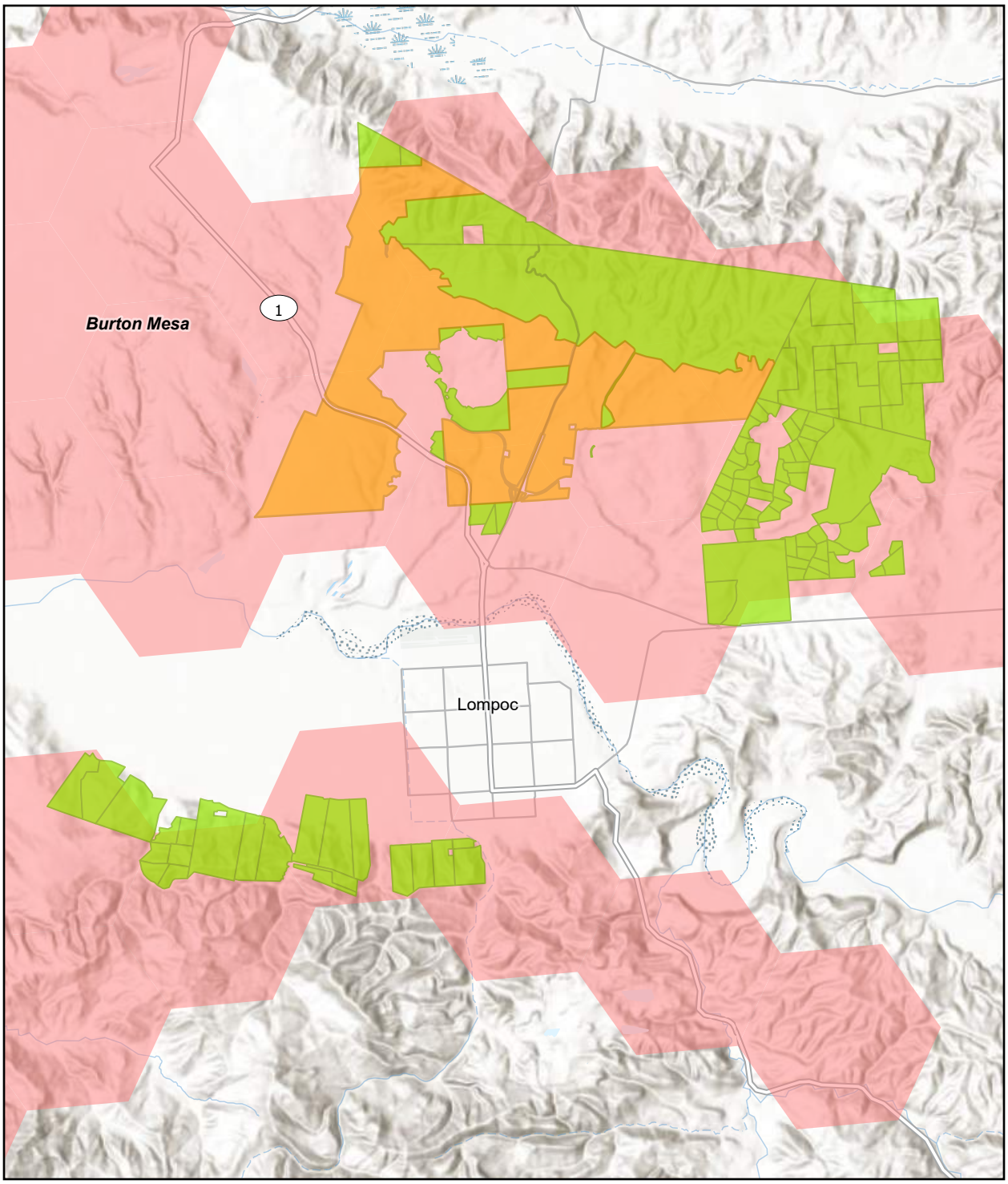
Map Created:
October 22, 2021 04:18 PM by KRN

Potential Mitigation Parcels - Santa Barbara County



Legend

- Dana Reserve
- Potential Mitigation Parcel
- Observed Burton Mesa Chaparral Extent
- Burton Mesa Ecological Reserve

N

0 0.5 1 2 Miles

Dana Reserve
Map Center: 120.45263°W 34.67315°N
Lompoc, Santa Barbara County

Data Sources: CNDDB, CCH, SSURGO

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Map Created:
October 22, 2021 04:18 PM by KRN

N. Frontage Road Extension
Addendum to Biological Report for
Dana Reserve Specific Plan

N. Frontage Road Extension
Addendum to Biological Report

for

Dana Reserve Specific Plan

Master Vesting Tentative Tract Map 3159
Nipomo, San Luis Obispo County

Prepared for

Dana Reserve, LLC
684 Higuera St., Ste. B
San Luis Obispo, CA 93401
(805) 541-9004

By

ALTHOUSE AND MEADE, INC.
BIOLOGICAL AND ENVIRONMENTAL SERVICES
1602 Spring Street
Paso Robles, CA 93446
(805) 237-9626

February 2022

Table of Contents

List of Tables

List of Figures

List of Appendices

Cover Photo: North Frontage Road, view east. January 20, 2022.

EXECUTIVE SUMMARY

- A Public Works improvement plan is proposed to extend North Frontage Road from Sandydale Lane to the southeastern corner of Dana Reserve. The extension is part of the County of San Luis Obispo's Capital Improvement Plans and was a condition of approval for a development plan for the Assessor's Parcel Number (APN) 091-325-022.
- The proposed road extension will impact the eastern 1.5 acres of an existing 4.91 acre parcel (APN 091-325-022). Improvements include widening North Frontage Road to 60-feet, implementing a 10-foot public utility easement, and extending a culvert to a Caltrans' culvert under Highway 101.
- Coyote brush scrub, nonnative perennial grassland habitat (dominated by veldt grass), eucalyptus saplings, a patch of arroyo willow, and scattered eucalyptus saplings will be impacted by proposed work
- No special status botanical or wildlife species were detected within the Study Area during January 20, 2022, field survey. Rare plant occurrences are unlikely in this disturbed habitat dominated by dense veldt grass. Spring follow-up surveys will be conducted in 2022.
- No jurisdictional wetlands were observed onsite, though deep compaction on the current access road may contribute to occasional ponding and eventual runoff to the adjacent Highway 101 stormwater swale and culvert.

1 INTRODUCTION

1.1 Project Location, Description, and Purpose

The Study Area includes North Frontage Road extension located on the east side of Assessor's Parcel Number (APN) 091-325-022 and a small portion of Cal Trans Right of Way. The Study Area is in Nipomo, California, immediately west of U.S. Highway 101 at the northern terminus of existing N. Frontage Road and Sandydale Drive. Approximate coordinates for the center of the Study Area are 35.04608° N, 120.49382° W (WGS84) in the Nipomo United States Geological Survey (USGS) 7.5-minute topographic quadrangles (Figure 1). A public work improvement plan delineates the extension of N. Frontage Road from Sandydale Drive to the southeastern corner of Dana Reserve (EDA 2005). The road widening and extension is part of the County of San Luis Obispo's Capital Improvement Plans and was a condition of approval for a previously planned, but now terminated, development on the property. he Study Area presently contains an unpaved access road for public utilities, such as a high-pressure gas line that runs along the eastern perimeter. The proposed extension of N. Frontage Road in the Study Area will follow the general path of the current unpaved road and extend its width (Figure 2). An environmental survey was conducted to evaluate the temporary and permanent impacts of the proposed improvements.

1.2 Site History and Existing Conditions

Historically, the Study Area was open grassland with eucalyptus trees bordering the north, east, and west boundaries, likely planted as wind barriers (Photo 1). However, by 2005 these trees were removed, along with most vegetation in the Study Area (Photo 2). An unpaved access road was established during this time, which remains in use today. The access road appears to have been created from public works' projects, including routing a high-pressure gas pipeline and a stormwater culvert between the Study Area and Highway 101 (Photo 3). The land appears to have last been heavily disturbed in 2005. Subsequently, a small patch of willows developed in a swale next to the access road. Evidence of wetlands was not observed in the soil or associated understory vegetation.

Dominant plants are disturbance followers. There is evidence of fire suppression clearing near the neighboring houses on the western boundary and maintenance of an access road along the eastern border. Additionally, we observed an unhoused person's encampment under willow canopy near the storm culvert outlet (Photo 4).

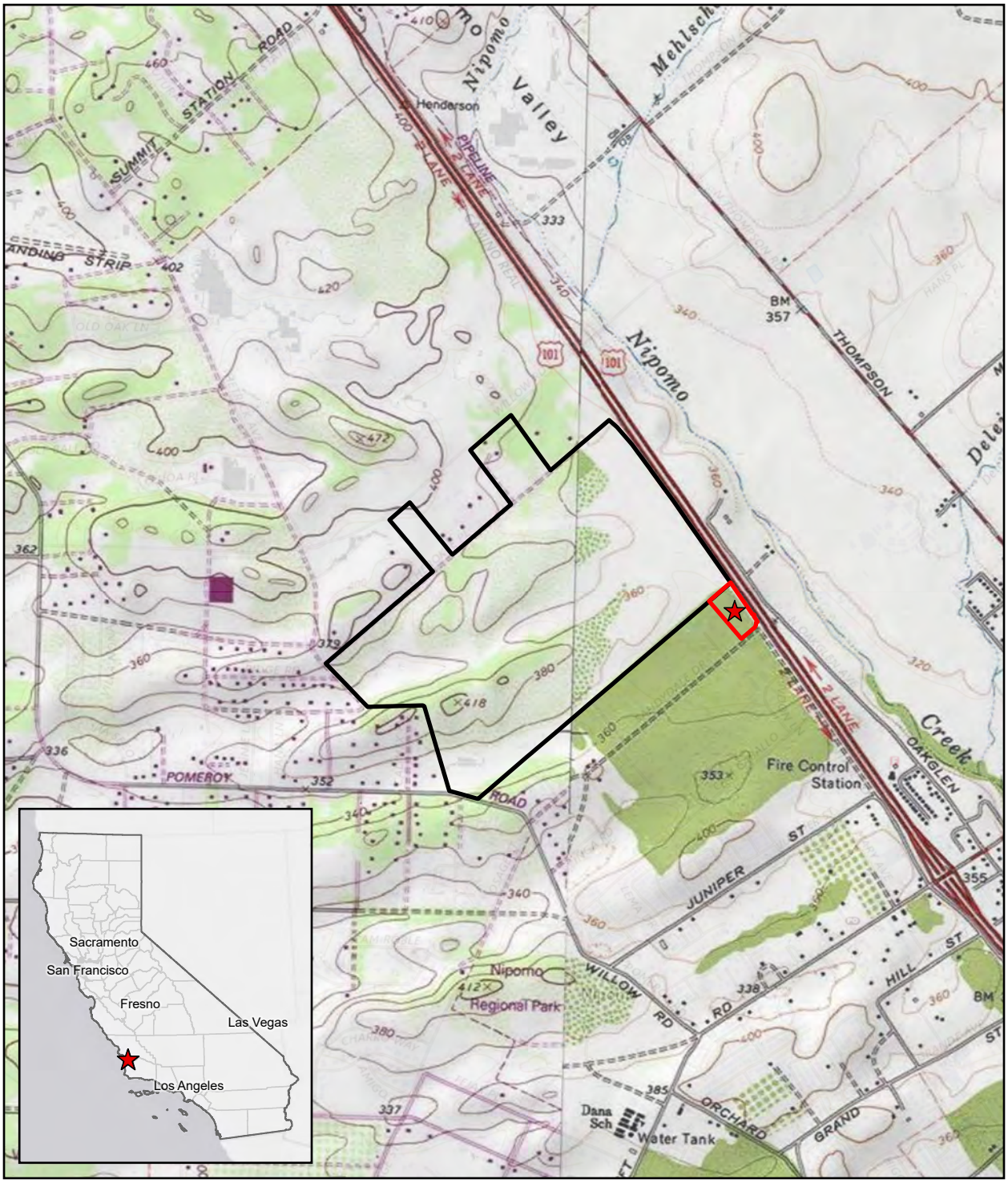
Photo 1. Aerial view of study area (yellow). September 1994.

Photo 2. Aerial view of study area (yellow). August 2005.

Photo 3. Stormwater culvert between Study Area and Highway 101 southbound, view east. January 20, 2022.

Photo 4. Debris from unhoused person's encampment along access road, view southwest. January 20, 2022.

Figure 1. United States Geological Survey Topographic Map



Legend

- Study Area Location
- N. Frontage Extension Property (APN 091-325-022)
- Dana Reserve (APNs 091-301-029, -030, -031 and -073)

N

0 1,000 2,000 Feet

North Frontage Road Extension
Map Center: 120.504°W 35.04656°N
Nipomo, San Luis Obispo County

USGS Quadrangle: Oceano and Nipomo

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Map Updated:
January 31, 2022 02:09 PM by ZAR

Figure 2. Aerial Map Photograph

Legend

- Study Area (4.91 acres)
- Impact Area (1.50 acres)
- Existing ROW
- Proposed ROW

N

0 50 100 Feet

North Frontage Road Extension
Map Center: 120.49382°W 35.04608°N
Nipomo, San Luis Obispo County

Imagery Source(s):
Althouse and Meade, Inc., 01/20/2022
ESRI World Imagery, 05/19/2021

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Map Updated:
February 09, 2022 06:28 PM by ZAR

2 METHODS

Biologists Kyle Nessen and Zach Raposo surveyed the Study Area for biological and wetland resources on January 20, 2022 (Table 1). A meandering transect survey was conducted on foot to inventory existing species, special status plants and animals, and habitat types, as well as collect photographic documentation of the Study Area.

TABLE 1. BIOLOGICAL SURVEY

Survey Date	Biologist(s)	Weather Observations	Activities
1/20/2022	Kyle Nessen, Zach Raposo	56 °F, 0-5 mph, clear	Initial survey and drone flight

Data were overlaid onto drone-derived photographs of the Study Area acquired on January 20, 2022, by 14 CFR Part 107 certified pilot Kyle Nessen. A georeferenced composite image of the Study Area was generated from the acquired aerial images for baseline review and image analysis. All flight operations were conducted within visual line of sight and below a maximum altitude of 400 feet aboveground level. The Study Area occurs within Class G airspace, and flight operations were conducted with prior permission from the property owner.

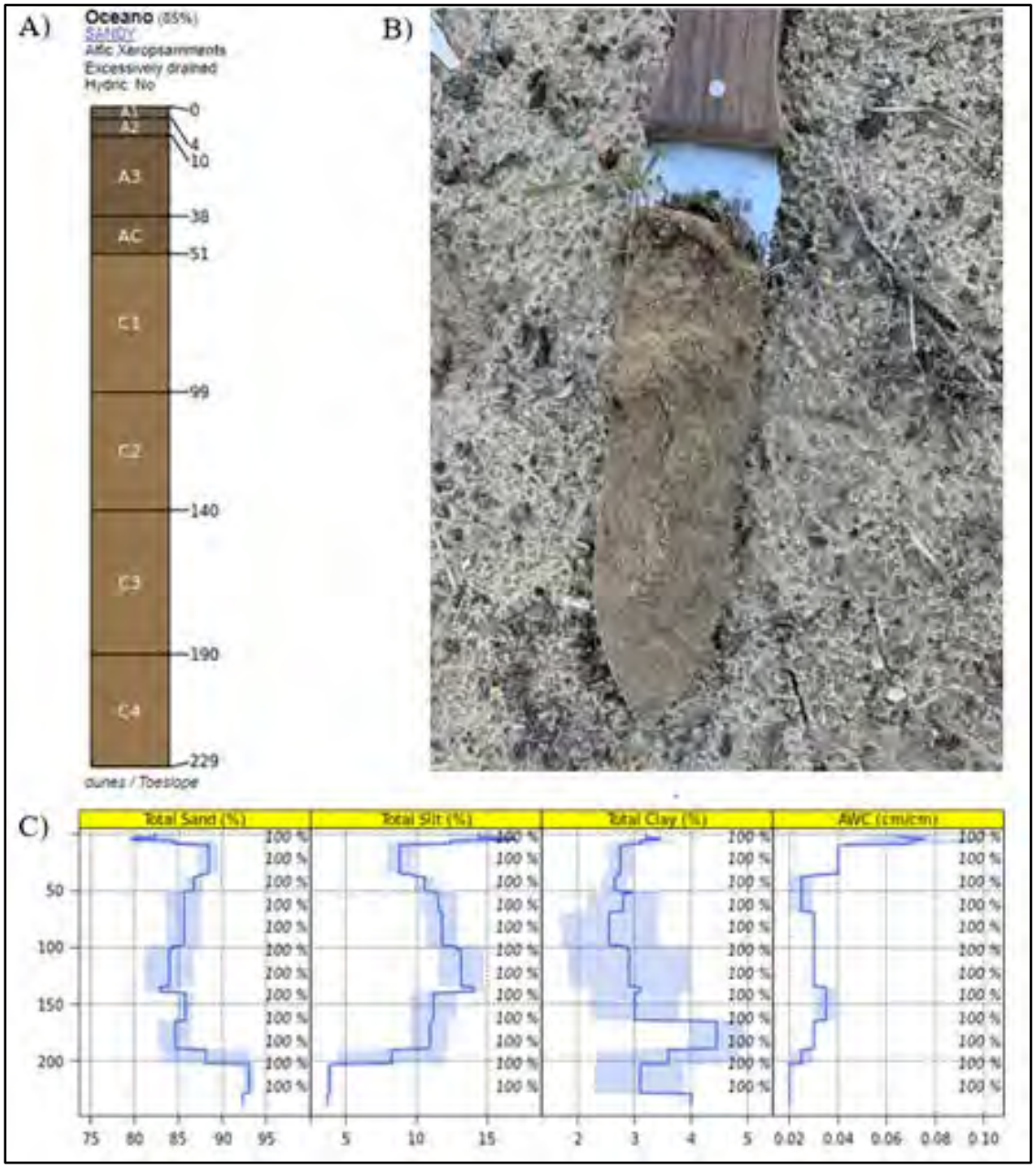
2.1 Soils

The Study Area's soil type closely matches the Oceano series found throughout Dana Reserve, with deep, excessively drained, sandy profiles (Graphic 1). This soil formed from accumulated windblown sand with traces of silt and is currently stabilized by small herbs and forbs while maintaining a dune-like texture on the landscape.

Photo 5. Stormwater swale between Highway 101 southbound (right) and Study Area (left). Vew northwest. January 20, 2022.

Photo 6. Ditch between access road and culvert, view west. January 20, 2022.

The site's undisturbed soil contained permeable, single-grained sand with many fine roots dissipating at depth, and no hydric soil indicators were observed throughout the Study Area. However, the current access road endured deep compaction from past disturbance and potentially led to occasional ponding and eventual runoff to the adjacent Highway 101 stormwater swale and culvert (Photos 5 and 6).



Graphic 1. A) Typical Oceano soil series profile, B). Photo shows 6-inch soil sample from January 20, 2021, field visit, C) Aggregate lab data of Oceano Soil Series samples collected nearby the study area providing insight on sand, silt and clay percentages and available water capacity by depth (NCSS 2001).

3 BIOLOGICAL RESOURCES

3.1 Habitats

The Study Area is comprised of two habitat types: coyote brush scrub and nonnative perennial grassland. Each habitat accounts for approximately half the Study Area, with coyote brush scrub occupying 55% and nonnative perennial grassland occupying 45%. Neither is considered a sensitive community by California Department of Fish and Wildlife (CDFW 2022), and no special status species were observed.

TABLE 2. HABITATS

Habitat Name	CNPS MCV Alliance	Acres
Coyote Brush Scrub	*Baccharis pilularis* shrubland alliance	2.68
Nonnative Perennial Grassland	Mediterranean California naturalized annual and perennial grassland group	2.23

3.1.1 Coyote Brush Scrub (Baccharis pilularis shrubland alliance)

Coyote brush scrub occupies the eastern half of the Study Area where shrub or tree species are conspicuously present (Figure 3). Coyote brush (*Baccharis pilularis*) accounts for over 70% of the relative shrub canopy, with bush lupine (*Lupinus arboreus*) and deerweed (*Acmispon glaber*) appearing in low numbers. We map coyote brush scrub as *Baccharis pilularis* shrubland alliance in the CNPS Manual of California Vegetation (MCV) because of the strong presence of coyote brush (CNPS 2022). In addition, isolated individuals of mature bluegum trees (*Eucalyptus globulus*) are found throughout this habitat type. The understory is dominated by nonnative grasses and forbs, such as ripgut brome (*Bromus diandrus*) and filaree species *(Erodium* spp.). Telegraph weed (*Heterotheca grandiflora*), a native forb that co-occurs with other weedy species, is also common.

Several individuals of arroyo willow (*Salix lasiolepis*) occur within coyote brush scrub. Willow trees primarily occur as isolated trees, but a semi-continuous canopy forms along the study area's eastern edge (Figure 3). When considered in the context of the habitat, willow cover did not exceed 5% absolute cover, thus not meeting the minimum relative or absolute cover criteria to be included in *Salix lasiolepis* Shrubland Alliance (CNPS 2022). Willows are phreatophytes, meaning they have a deep root system that taps into the underground water table (Robinson 1958). It is likely willows on site are supported by occasional moist conditions associated with a swale and nearby storm culvert. No other wetland indicator species were present in the understory or vicinity of willow canopy.

Photo 7. Coyote brush scrub habitat with isolated willow and mature blue gums in background, view north. January 20, 2022.

3.1.2 Nonnative Perennial Grassland (Mediterranean California naturalized annual and perennial grassland group)

Nonnative perennial grassland is found throughout the western half of the Study Area and is characterized by a near monoculture of veldt grass (*Ehrharta calycina*). Over 90% of the vegetative cover within this habitat type is veldt grass, with only the occasional coyote brush or bush lupine occurring within the shrub layer. A row of blue gum trees lines the boundary between the Study Area and Dana Reserve, and no willows occur within nonnative perennial grassland. Telegraph weed is the only other prominent herbaceous species within this habitat type. Nonnative perennial grassland is considered a semi-natural stand and has not been formally described in the CNPS MCV. Therefore, we map this habitat type as Mediterranean California naturalized annual and perennial grassland group according to the U.S. National Vegetation Classification (USNVC 2021). No special status plants or animals were detected in nonnative perennial grassland during the January 2022 botanical survey.

Photo 8. Nonnative perennial grassland habitat with veldt grass dominating the foreground, view south. January 20, 2022.

Figure 3. Biological Resources

Legend

- Study Area (4.91 acres)
- Impact Area (1.50 acres)
- Existing ROW
- Proposed ROW
- Willow Canopy (0.14 acres)

Habitats

- Coyote Brush Scrub (2.68 acres)
- Nonnative Perennial Grassland (2.23 acres)

N

0 50 100 Feet

North Frontage Road Extension
Map Center: 120.49382°W 35.04608°N
Nipomo, San Luis Obispo County

Contour Interval: 1-foot

Imagery Source(s):
Althouse and Meade, Inc., 01/20/2022
ESRI World Imagery, 05/19/2021

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Map Updated:
February 09, 2022 06:29 PM by ZAR

3.2 Botanical Survey Results

Table 3 lists twenty-seven species of vascular plants that were identified in the Study Area on January 20, 2022. Fifteen species were native (56%), and twelve were introduced (44%). The vascular plant list is separated into general life form categories, within which the taxa are listed alphabetically by scientific name. No special status botanical species were identified during the field survey.

TABLE 3. VASCULAR PLANT LIST

Scientific Name	Common Name	Origin
Trees - 6 Species		
Eucalyptus globulus	Blue-gum	Introduced
Populus trichocarpa	Black cottonwood	Native
Salix lasiolepis	Arroyo willow	Native
Shrubs - 3 Species		
Baccharis pilularis	Coyote brush	Native
Lupinus arboreus	Bush lupine	Native
Toxicodendron diversilobum	Poison oak	Native
Forbs - 18 Species		
Acmispon glaber	Deerweed	Native
Brassica nigra	Black mustard	Introduced
Chenopodium californicum	Pigweed	Native
Crassula connata	Pygmyweed	Native
Croton californicus	California croton	Native
Erodium cicutarium	Redstem filaree	Introduced
Erodium texanum	Desert heron's bill	Native
Gazania linearis	Gazania	Introduced
Helianthus annuus	Common sunflower	Native
Heterotheca grandiflora	Telegraph weed	Native
Lupinus nanus	Sky blue lupine	Native
Lupinus truncates	Lupine	Native
Medicago polymorpha	California burclover	Introduced
Oenothera elata	Evening primrose	Native
Oxalis pes-caprae	Bermuda buttercup	Introduced
Plantago lanceolata	English plantain	Introduced
Pseudognaphalium luteoalbum	Jersey cudweed	Introduced
Salsola tragus	Russian thistle	Introduced
Graminoids – 3 Species		
Bromus diandrus	Ripgut brome	Introduced
Cortaderia selloana	Pampas grass	Introduced
Ehrharta calycina	Veldt grass	Introduced

3.3 Wildlife Survey Results

Table 4 lists twelve species of animals, including one invertebrate, one reptile, and ten bird species detected during January 20, 2022, survey. No special status animals were observed on site.

TABLE 4. WILDLIFE LIST

Scientific Name	Common Name	Habitat Type
Invertebrates – 1 Species		
Danaus plexippus	Monarch Butterfly	Open, sunny habitats. (Clustering was not observed within Study Area)
Reptiles – 1 Species		
Sceloporus occidentalis bocourtii	Coast Range Fence Lizard	Wide range; variety of habitats
Birds – 10 Species		
Aphelocoma californica	California Scrub-jay	Oak, riparian woodlands
Buteo jamaicensis	Red-tailed Hawk	Open, semi-open country
Calypte anna	Anna's Hummingbird	Many habitats
Cathartes aura	Turkey Vulture	Open country
Melozone crissalis	California Towhee	Chaparral scrub, shrubby urban areas
Psaltriparus minimus	Bushtit	Woodlands, chaparral
Setophaga coronata	Yellow-rumped Warbler	Coniferous and mixed woodland (breeding); shrubby areas and parks (winter)
Sialia mexicana	Western Bluebird	Woodland near open areas
Streptopelia decaocto	Eurasian Collared Dove	Urban and suburban areas
Zonotrichia leucophrys	White-crowned Sparrow	Open or shrubby habitats

3.4 Potential for Special Status Species

Particular attention during the January 20, 2022 site visit was given to identify special status species which were detected on adjacent Dana Reserve throughout 2017-2020 surveys. Those species included eight special status plant taxa: sand mesa manzanita (*Arctostaphylos rudis*), Nipomo mesa ceanothus (*Ceanothus impressus* var. *nipomensis*), sand buck brush (*Ceanothus cuneatus* var. *fascicularis*), sand almond (*Prunus fasciculata* var. *punctata*), Pismo clarkia (*Clarkia speciosa* ssp. *immaculata*), mesa horkelia (*Horkelia cuneata* var. *puberula*), and California spineflower (*Mucronea californica*). None of these species were detected within the Study Area. Spring botanical surveys are needed to confirm the absence of two annual species, California spineflower and Pismo clarkia. The dense veldt grass and lack of coast live oak trees make it highly unlikely that Pismo clarkia will be present on site. California spineflower was not detected as standing dead from previous years, but could occcur in sandy disturbed areas.

In addition, surveys for signs of nesting birds or badger dens were conducted on January 20, 2022. No indicators of special status animals were present within the Study Area. Please refer to section 3.6.1 and 3.7.1 of the Biological Report for Dana Reserve Specific Plan (A&M 2021) for a full discussion of potential special status species. No new species were added to the California Natural Diversity Database in this area since the original Biological Report was submitted (CNDDB 2022).

4 ENVIRONMENTAL IMPACT ANALYSIS

All temporary and permanent impacts of the proposed improvements will occur on the eastern edge of the Study Area within APN 091-325-022 and Cal Trans Right of Way. Permanent impacts include a 0.86-acre area, which accounts for an expanded width of the access road and the extended culvert to existing Highway 101 southbound culvert (Figure 4). There will be an additional 0.64-acre of land temporarily impacted – including an approximate 0.18-acre temporary retention basin. Table 5 displays the temporary and permanent impacts by habitat type. Within coyote brush scrub, 0.14-acre of willow canopy exists, of which 0.12-acre will be permanently impacted.

TABLE 5. HABITAT IMPACTS FROM PROJECT

Habitat Type	Permanent Impact (Ac.)	Temporary Impact (Ac.)	Total (Ac.)
Coyote brush scrub	0.81	0.59	1.40
Nonnative perennial grassland	0.05	0.05	0.10
Total	**0.86**	**0.64**	**1.50**

4.1 Recommendations

Project activities and impacts described in this Addendum should follow best construction practices for biological resource protection. Please refer to Section 4.5 of the Biological Report for Dana Reserve Specific Plan to review "Construction Best Practices for Biological Resource Protection" (A&M 2021).

No sensitive species or habitats will be impacted by the proposed project, therefore no mitigation is required.

To augment pollinator and nesting bird habitat, we suggest planting willows or other deep-rooted shrubs and trees in the vicinity of stormwater facilities to enhance habitat for wildlife. Added benefits includes use of discharge from stormwater discharge facilities to support wildlife habitat suitable for birds and butterflies (Table 6).

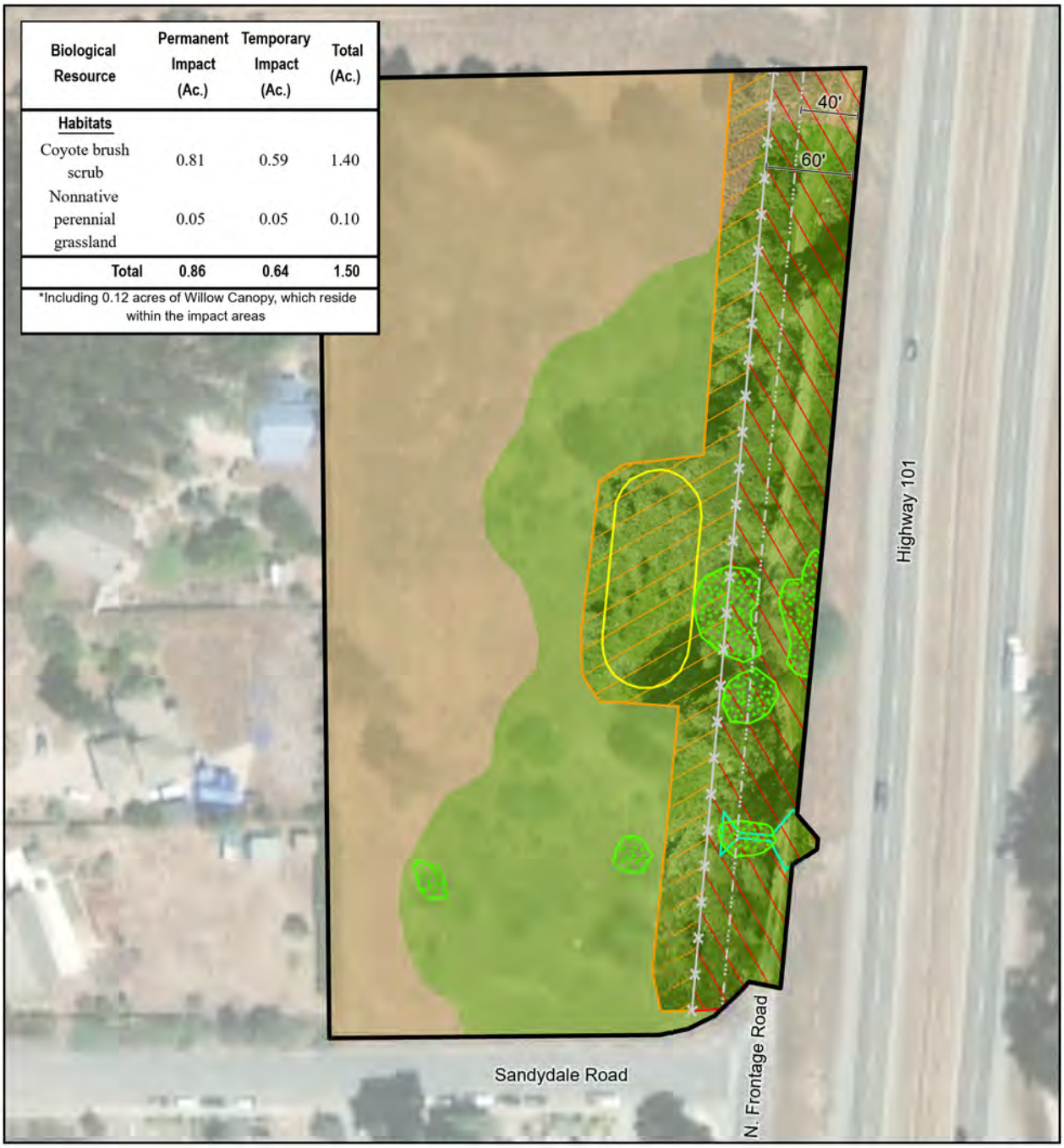
TABLE 6. IMPACT AND RECOMMENDATION SUMMARY

Impact	Potential Effect from Proposed Project	Recommendation	Benefit
Willow Tree and Canopy Loss	Reduction of habitat, soil stabilization, and water quality.	Onsite willow replanting by stormwater facilities, including the extended culvert and temporary retention basin.	Will improve wildlife habitat, soil stabilization for banks and increase water quality for nearby stormwater swale.

Figure 4. Biological Resource Impacts

Biological Resource	Permanent Impact (Ac.)	Temporary Impact (Ac.)	Total (Ac.)
Habitats			
Coyote brush scrub	0.81	0.59	1.40
Nonnative perennial grassland	0.05	0.05	0.10
Total	**0.86**	**0.64**	**1.50**

*Including 0.12 acres of Willow Canopy, which reside within the impact areas



Legend

- Study Area (4.91 acres)
- Permanent Impacts (0.86 acres)
- Temporary Impact (0.64 acres)
- Culvert Improvements (1000 square feet)
- Temporary Rentention Basin (0.18 acres)
- Existing ROW
- Proposed ROW
- Willow Canopy

Habitats

- Coyote Brush Scrub
- Nonnative Perennial Grassland

N

0 50 100 Feet

North Frontage Road Extension
Map Center: 120.49399°W 35.04597°N
Nipomo, San Luis Obispo County

Imagery Source(s):
Althouse and Meade, Inc., 01/20/2022
ESRI World Imagery, 05/19/2021

ALTHOUSE AND MEADE, INC.
BIOLOGICAL AND ENVIRONMENTAL SERVICES

Map Updated:
February 09, 2022 06:31 PM by ZAR

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6 APPENDICES

- **Appendix A. Public Improvement Plans for CO 03-0301 Community of Nipomo, County of San Luis Obispo, California (EDA 2005; Sheets 1, 3, 4, 11)**

PUBLIC IMPROVEMENT PLANS FOR

CO 03-0301

COMMUNITY OF NIPOMO, COUNTY OF SAN LUIS OBISPO, CALIFORNIA

GENERAL NOTES

GENERAL CONSTRUCTION NOTES:

1. NO CONSTRUCTION SHALL BE STARTED WITHOUT PLANS APPROVED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS AND THE NIPOMO COMMUNITY SERVICES DISTRICT (NCSD). THE DEPARTMENT OF PUBLIC WORKS AND NCSD SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO STARTING CONSTRUCTION AND OF THE TIME LOCATION OF THE PRECONSTRUCTION CONFERENCE. ANY CONSTRUCTION DONE WITHOUT APPROVED PLANS OR PRIOR NOTIFICATION TO THE DEPARTMENT OF PUBLIC WORKS AND NCSD WILL BE REJECTED AND WILL BE AT THE CONTRACTOR'S AND/OR OWNER'S RISK.

2. ALL CONSTRUCTION WORK AND INSTALLATIONS SHALL CONFORM TO THE COUNTY OF SAN LUIS OBISPO STANDARDS AND SPECIFICATIONS, AND THE UNIFORM BUILDING CODE. ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE DEPARTMENT OF PUBLIC WORKS AND THE ENGINEER OF RECORD.

3. SOILS TESTS SHALL BE DONE IN ACCORDANCE WITH THE COUNTY STANDARDS AND SPECIFICATIONS SECTION 11-351.1403 AND 11-351.1404. ALL TESTS MUST BE MADE WITHIN 15 DAYS PRIOR TO THE PLACING MATERIAL. THE TEST RESULTS SHALL CLEARLY INDICATE THE LOCATION AND SOURCE OF THE MATERIAL.

4. COMPACTION TESTS SHALL BE MADE ON SUBGRADE MATERIAL AND MATERIAL AS SPECIFIED BY THE ENGINEER. SAID TESTS SHALL BE MADE PRIOR TO PLACING OF THE NEXT MATERIAL.

5. SUBGRADE MATERIAL SHALL BE COMPACTED TO A RELATIVE COMPACTION OF 95 % IN THE ZONE BETWEEN FINISHED SUBGRADE ELEVATION AND ONE FOOT BELOW. ALL MATERIAL IN FILL SECTIONS BELOW THE ZONE MENTIONED ABOVE SHALL BE COMPACTED TO 90 % RELATIVE COMPACTION.

6. A REGISTERED CIVIL ENGINEER MUST CERTIFY THAT THE IMPROVEMENTS WHEN COMPLETED ARE IN ACCORDANCE WITH THE PLANS PRIOR TO THE REQUEST FOR A FINAL INSPECTION. RECORD DRAWINGS SHALL BE PREPARED AFTER CONSTRUCTION IS COMPLETED. THE CIVIL ENGINEER CERTIFYING THE IMPROVEMENTS AND PREPARING RECORD DRAWINGS WILL BE PRESENT WHEN THE FINAL INSPECTION IS MADE.

7. AN INSPECTION AGREEMENT IS REQUIRED PRIOR TO THE START OF CONSTRUCTION.

8. ALL UTILITY COMPANIES MUST BE NOTIFIED PRIOR TO THE START OF CONSTRUCTION.

9. A COUNTY ENCHROACHMENT PERMIT IS REQUIRED AND SHALL BE OBTAINED BY THE CONTRACTOR FOR ALL WORK DONE WITHIN THE COUNTY RIGHT-OF-WAY. THE ENCROACHMENT PERMIT MAY ESTABLISH ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.

10. THE COUNTY INSPECTOR ACTING ON BEHALF OF THE COUNTY DEPARTMENT OF PUBLIC WORKS MAY REQUIRE REVISIONS IN THE PLANS TO SOLVE UNFORSEEN PROBLEMS THAT MAY ARISE IN THE FIELD. ALL REVISIONS SHALL BE SUBJECT TO THE APPROVAL OF THE DEVELOPER'S ENGINEER.

11. THE STRUCTURAL SECTION SHALL BE BASED ON SOILS TESTS MADE AT THE TIME OF CONSTRUCTION AND ON A TRAFFIC INDEX AS SHOWN ON THE TYPICAL ROAD SECTION(S) DETAILED HEREIN.

12. FOR ANY PUBLIC IMPROVEMENTS TO BE MAINTAINED BY THE COUNTY, IF ENVIRONMENTAL PERMITS FROM U.S. ARMY CORPS OF ENGINEERS, THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD/STATE WATER RESOURCES CONTROL BOARD, OR THE CALIFORNIA DEPARTMENT OF FISH & GAME ARE REQUIRED, THE DEVELOPER SHALL:

A. SUBMIT A COPY OF ALL SUCH COMPLETED PERMITS TO THE COUNTY DEPARTMENT OF PUBLIC WORKS, OR;

B. DOCUMENT THAT THE REGULATORY AGENCIES DETERMINED THAT SAID PERMIT IS NOT REQUIRED; PRIOR TO ACCEPTANCE OF THE COMPLETED IMPROVEMENTS FOR COUNTY MAINTENANCE AND RELEASE OF IMPROVEMENT SECURITY. ANY MITIGATION MONITORING REQUIRED BY SAID PERMITS WILL REMAIN THE RESPONSIBILITY OF THE DEVELOPER.

13. THE CONTRACTOR SHALL MAINTAIN TWO-WAY TRAFFIC AT ALL TIMES. IF REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND SUBMITTING TO THE COUNTY OF SAN LUIS OBISPO A TRAFFIC CONTROL PLAN TO BE PREPARED IN ACCORDANCE WITH THE CURRENT CALTRANS MANUAL FOR TRAFFIC CONTROL AND WORK AREA TRAFFIC CONTROL HANDBOOK. NO STREET CLOSURE SHALL BE PERMITTED UNLESS PREVIOUSLY ARRANGED FOR AND GRANTED BY THE COUNTY ENGINEERING DEPARTMENT.

14. ALL PUBLIC IMPROVEMENTS (ROADS, DRAINAGE AND UTILITIES) SHALL BE COMPLETED PRIOR TO THE OCCUPANCY OF BUILDINGS.

15. THE ENGINEER OF WORK SHALL BE RESPONSIBLE TO ASSURE THAT THE APPROPRIATE EXISTING TRAFFIC CONTROLS REMAIN IN PLACE AND FUNCTIONAL DURING ALL CONSTRUCTION PHASES. CONTRACTOR SHALL COVER ANY CONFLICTING SIGNS THAT EXIST ALONG THE ROADWAY.

16. NO WORK SHALL COMMENCE WITHOUT THE CONSTRUCTION SIGNS INSTALLED AND OTHER NECESSARY TRAFFIC CONTROL DEVICES ON SITE.

17. NO CONSTRUCTION EQUIPMENT OR MATERIALS SHALL BE PARKED OR STORED WITHIN SIX FEET OF THE TRAVELED WAY. WHEN CONSTRUCTION EQUIPMENT OR MATERIALS STORED WITHIN THE RIGHT-OF-WAY ARE FURTHER THAN SIX FEET OFF THE TRAVELED WAY, THE SHOULDER AREA SHALL BE SIGNED AS CLOSED AND PORTABLE DELINEATORS USED TO MARK A TAPER IN ADVANCE OF THE MATERIAL OR EQUIPMENT. STORAGE OF EQUIPMENT OR MATERIALS SHALL NOT BLOCK OR DIVERT ANY DRAINAGE WAY OR CHANNEL.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ITEMS SHOWN ON ALL SHEETS OF THE PLANS. ANY DEVIATION FROM THESE PLANS WITHOUT PRIOR APPROVAL FROM THE DESIGN ENGINEER SHALL BE DONE AT THE CONTRACTOR'S OWN RISK AND EXPENSE.

19. EXISTING PAVEMENT SHALL BE SAW CUT IN ACCORDANCE WITH THE COUNTY STANDARDS AND SPECIFICATIONS TO REVEAL A SATISFACTORY STRUCTURAL SECTION AND NEW PAVING SHALL BE JOINED AT THIS POINT. APPLY A PAINT BINDER OF ASPHALTIC EMULSION TO ALL VERTICAL SURFACES OF THE EXISTING PAVEMENT AGAINST WHICH NEW MATERIAL IS TO BE PLACED. THE EXISTING STRUCTURAL SECTION SHALL BE INSPECTED BY THE COUNTY PUBLIC WORKS DEPARTMENT PRIOR TO THE CONSTRUCTION OF THE NEW SECTION.

20. THESE PLANS DO NOT AUTHORIZE SITE DISTURBANCE BEYOND THE LIMITS OF GRADING OR IMPROVEMENTS SHOWN HEREON. THE CONTRACTOR SHALL OBTAIN PERMISSION TO ENTER UPON ADJOINING PROPERTY TO CONSTRUCT IMPROVEMENTS OR TO GRADE ELSEWHERE PRIOR TO COMMENCING WORK. THE COUNTY ENGINEER DOES NOT AUTHORIZE ENTRY PER THESE APPROVED PLANS.

21. AGGREGATE BASE MATERIAL SHALL CONFORM TO THE REQUIREMENTS FOR AGGREGATE BASE AS SPECIFIED IN SECTION 26 OF THE STATE STANDARD SPECIFICATIONS. ANY WORK DONE THAT DOES NOT MEET OR EXCEED THE MINIMUM SPECIFICATION WILL BE REJECTED.

22. ASPHALT CONCRETE PAVING SHALL CONFORM TO THE REQUIREMENTS FOR ASPHALT CONCRETE AS SPECIFIED IN SECTION 39 OF THE STATE STANDARD SPECIFICATIONS. ANY WORK DONE THAT DOES NOT MEET OR EXCEED THE MINIMUM SPECIFICATION WILL BE REJECTED.

23. THE CONSTRUCTION CONTRACTOR SHALL MAINTAIN A CURRENT, COMPLETE AND ACCURATE RECORD OF ALL CHANGES WHICH DEVIATE FROM THE CONSTRUCTION AS PROPOSED IN THESE PLANS AND SPECIFICATIONS FOR THE PURPOSE OF PROVIDING THE ENGINEER WITH A BASIS FOR RECORD DRAWINGS. NO CHANGES SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE COUNTY ENGINEERING DEPARTMENT AND THE DESIGN ENGINEER.

24. THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE INDUSTRIAL SAFETY REGULATIONS. THE COUNTY OF SAN LUIS OBISPO AND ITS OFFICIALS, THE ENGINEER OF RECORD, AND THE OWNER SHALL NOT BE RESPONSIBLE FOR ENFORCING SAFETY REGULATIONS.

25. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES THE CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE CONDITION OF THE JOB SITE DURING THE COURSE OF CONSTRUCTION FOR THIS PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY, AND THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS THE COUNTY OF SAN LUIS OBISPO AND THE DESIGN PROFESSIONAL FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT, EXCEPTING LIABILITY ARISING FROM NEGLIGENCE OF THE DESIGN PROFESSIONAL.

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UNDERGROUND SERVICE ALERT OF CALIFORNIA

26. CONSTRUCTION GRADE STAKES SHALL BE SET BY A REGISTERED CIVIL ENGINEER OR A LICENSED LAND SURVEYOR REGISTERED IN THE STATE OF CALIFORNIA.

27. IN THE EVENT THAT THE CONTRACTOR OR SUBCONTRACTOR NOTICES IRREGULARITIES IN THE LINE OR GRADE HE SHALL BRING IT TO THE IMMEDIATE ATTENTION OF THE DESIGN ENGINEER AND THE COUNTY PUBLIC WORKS DEPARTMENT. IF HE FAILS TO DO SO, THE CONTRACTOR OR SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ANY ERROR IN THE GRADE AND NECESSARY RECONSTRUCTION TO CORRECT SUCH ERROR.

28. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OR PROPER RESETTING OF ALL SURVEY MARKERS. ANY SURVEY MONUMENTS DESTROYED BY THE CONTRACTOR SHALL BE REPLACED IN ACCORDANCE WITH THE STATE LAND SURVEYORS ACT AT THE CONTRACTOR'S OWN EXPENSE.

29. THE OWNER SHALL CONTRACT WITH A SOILS ENGINEER TO SUPERVISE THE GRADING AND CERTIFY THAT ALL GRADING HAS BEEN DONE IN CONFORMANCE WITH THESE PLANS, CHAPTER 33 OF THE UNIFORM BUILDING CODE, AND THE RECOMMENDATIONS OF THE PROJECT SOILS REPORT.

30. HYDROSEEDING SHALL BE PLACED ON ALL DISTURBED SURFACES OTHER THAN PAVED OR GRAVEL SURFACES, PRIOR TO FINAL INSPECTION.

31. ALL PROJECTS INVOLVING SITE DISTURBANCE OF ONE ACRE OR GREATER SHALL COMPLY WITH REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES). THE DEVELOPER SHALL SUBMIT A NOTICE OF INTENT (NOI) TO COMPLY WITH THE GENERAL PERMIT FOR CONSTRUCTION ACTIVITY WITH THE REGIONAL WATER QUALITY CONTROL BOARD (RWQCB). THE DEVELOPER SHALL PROVIDE THE COUNTY WITH THE WASTE DISCHARGE IDENTIFICATION NUMBER (WDIID #) OR WITH VERIFICATIONTHAT AN EXEMPTION HAS BEEN GRANTED BY THE RWQCB.

WDID # 340C333702

32. PRIOR TO OCCUPANCY OF ANY STRUCTURE ASSOCIATED WITH THIS APPROVAL, THE APPLICANT SHALL CONTACT THE DEPARTMENT OF PLANNING AND BUILDING TO HAVE THE SITE INSPECTED FOR COMPLIANCE WITH THE CONDITIONS OF APPROVAL.

33. A CALTRANS ENCROACHMENT PERMIT SHALL BE REQUIRED AND SHALL BE OBTAINED BY THE CONTRACTOR FOR ALL WORK DONE WITHIN THE CALTRANS RIGHT-OF-WAY.

DUST CONTROL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLACEMENT AND MAINTENANCE OF ALL EROSION CONTROL DEVICES AS SPECIFIED BY THE ENGINEER OF WORK OR THE COUNTY OF SAN LUIS OBISPO UNTIL SUCH TIME THAT THE PROJECT ACCEPTED AS COMPLETED BY THE GOVERNING JURISDICTION. THESE DEVICES SHALL BE IN PLACE OR BE READY TO PLACE FROM OCTOBER 15 TO APRIL 15. IN THE EVENT THAT THE DEVICES ARE NOT PERMANENTLY IN PLACE, THEY SHALL BE PLACED IN THE EVENT A FORECAST FOR RAIN EXCEEDS 30 %. AN EMERGENCY CREW SHALL BE AVAILABLE 24 HOURS PER DAY IN THE EVENT AN EROSION PROBLEM SHOULD OCCUR. A RESPONSIBLE PERSON AND THEIR PHONE NUMBER SHALL BE NAMED HERE UPON:

NAME: BOB ROBINSON
PHONE: (805) 961-830[illegible]

2. THE CONTRACTOR SHALL PROVIDE DUST CONTROL DURING ALL PHASES OF THE WORK.

3. THE GRADING PERMIT HOLDER AND THE OWNER SHALL COMPLY WITH DUST CONTROL MEASURES REQUIRED BY THE COUNTY OF SAN LUIS OBISPO. THE STANDARD DUST CONTROL MEASURES INCLUDE BUT MAY NOT BE LIMITED TO:

A. DUST CONTROL MEASURES CAPABLE OF PREVENTING THE MIGRATION OF DIRT AND DUST OFF SITE, IN A MANNER ACCEPTABLE TO THE COUNTY OF SAN LUIS OBISPO SHALL BE IMPLEMENTED AND MAINTAINED DURING ALL CONSTRUCTION, EARTH MOVING, AND GRADING PHASES OF THE PROJECT. FAILURE TO DO SO WILL RESULT IN THE ISSUANCE OF A "STOP WORK" ORDER WHICH WILL NOT BE RELEASED UNTIL SUCH TIME AS AN ADEQUATE PROGRAM IS IMPLEMENTED.

B. REDUCE THE AMOUNT OF THE DISTURBED AREA WHERE POSSIBLE.

C. USE OF WATER TRUCKS OR SPRINKLER SYSTEMS IN SUFFICIENT QUANTITIES TO PREVENT AIRBORNE DUST FROM LEAVING THE SITE. INCREASED WATERING FREQUENCY WOULD BE REQUIRED WHENEVER WIND SPEEDS EXCEED 15 MPH. RECLAIMED (NONPOTABLE) WATER SHOULD BE USED WHENEVER POSSIBLE.

D. ALL DIRT STOCK-PILE AREAS SHOULD BE SPRAYED DAILY AS NEEDED.

E. PERMANENT DUST CONTROL MEASURES IDENTIFIED IN THE APPROVED PROJECT REVEGETATION AND LANDSCAPE PLANS SHOULD BE IMPLEMENTED AS SOON AS POSSIBLE FOLLOWING COMPLETION OF ANY SOIL DISTURBING ACTIVITIES.

F. EXPOSED GROUND AREAS THAT ARE PLANNED TO BE REWORKED AT DATES GREATER THAN ONE MONTH AFTER INITIAL GRADING SHOULD BE SOWN WITH A FAST-GERMINATING NATIVE GRASS SEED AND WATERED UNTIL VEGETATION IS ESTABLISHED.

G. ALL DISTURBED SOIL AREAS NO SUBJECT TO REVEGETATION SHOULD BE STABILIZED USING APPROVED CHEMICAL SOIL BINDERS, JUTE NETTING, OR OTHER METHODS APPROVED IN ADVANCE BY THE THE APCD.

H. ALL ROADWAYS, DRIVEWAYS, SIDEWALKS ETC. TO BE PAVED SHOULD BE COMPLETED AS SOON AS POSSIBLE. IN ADDITION, BUILDING PADS SHOULD BE LAID AS SOON AS POSSIBLE AFTER GRADING UNLESS SEEDING OR SOIL BINDERS ARE USED.

I. VEHICLE SPEED FOR ALL CONSTRUCTION VEHICLES SHALL NOT EXCEED 15 MILES PER HOUR ON ANY UNPAVED SURFACE AT THE CONSTRUCTION SITE.

J. ALL TRUCKS HAULING DIRT, SAND, OR OTHER LOOSE MATERIALS ARE TO BE COVERED OR SHOULD MAINTAIN AT LEAST TWO FEET OF FREE BOARD (MINIMUM VERTICAL DISTANCE BETWEEN TOP OF LOAD AND TOP OF TRAILER) IN ACCORDANCE WITH CVC SECTION 23114.

K. INSTALL WHEEL WASHERS WHERE VEHICLES ENTER AND EXIT UNPAVED ROADS ONTO STREETS, OR WASH OFF TRUCKS AND EQUIPMENT LEAVING THE SITE.

L. SWEEP STREETS AT THE END OF EACH DAY IF VISIBLE SOIL MATERIAL IS CARRIED ONTO ADJACENT PAVED ROADS. WATER SWEEPERS WITH RECLAIMED WATER SHOULD BE USED WHERE FEASIBLE.

M. 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 OFF SITE. THEIR DUTIES SHALL INCLUDE HOLIDAYS AND WEEKEND PERIODS WHEN WORK MAY NOT BE IN PROGRESS. THE NAME AND TELEPHONE NUMBER OF SUCH PERSONS SHALL BE PROVIDED TO THE APCD PRIOR TO LAND USE CLEARANCE FOR FINISH GRADING OF STRUCTURES.

N. THE REQUIRED DUST CONTROL BOND WILL NOT BE RELEASED UNTIL THE SITE GRADING HAS BEEN SEEDED OR A SOIL BINDER APPLIED TO THE SATISFACTION OF THE COUNTY.

AIR QUALITY CONTROL NOTES:

1. PRIOR TO DEVELOPMENTAL BURNING OF VEGETATIVE MATERIAL, THE APPLICANT SHALL APPLY FOR AND OBTAIN A BURN PERMIT FROM THE APCD AND COUNTY FIRE/CALIFORNIA DEPARTMENT OF FORESTRY. THE APPLICATION REQUIRES THE SUBMITTAL OF A TECHNICAL FEASIBILITY STUDY.

UTILITY GENERAL NOTES:

1. ALL UTILITIES SHOWN ARE ACCURATE TO THE EXTENT OF AVAILABLE RECORDS AND KNOWLEDGE. THE CONTRACTOR HAS THE TOTAL RESPONSIBILITY TO VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND TO NOTIFY UTILITY COMPANIES WHEN WORKING IN THEIR PROXIMITY. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL POTHOLE TO VERIFY ALL EXISTING UTILITY POINTS OF CONNECTION AND ELEVATIONS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IF DISCREPANCIES EXIST BETWEEN THE PLANS AND FIELD CONDITIONS PERTAINING TO MATERIALS, ELEVATIONS, LOCATIONS, ETC. PRIOR TO CONTINUING WORK.

2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY "UNDERGROUND SERVICE ALERT" (USA) AT 1-800-227-2600 FOR LOCATION OF POWER, GAS, OIL, AND TELECOMMUNICATION UNDERGROUND FACILITIES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR CONTACTING THE RESPECTIVE UTILITY AGENCIES FOR THE LOCATION OF ALL UNDERGROUND FACILITIES.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WIRE AND GAS UTILITY TRENCHING AND CONDUIT PLACEMENT IN ACCORDANCE WITH HANDOUT PACKAGES PROVIDED BY THE RESPECTIVE UTILITY COMPANIES.

4. THE WATER DISTRIBUTION SYSTEM AND SEWAGE COLLECTION SYSTEM SHALL BE CONSTRUCTED PER LATEST STANDARDS AND SPECIFICATIONS OF THE COUNTY OF SAN LUIS OBISPO AND NCSD.

5. ELECTRIC UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND SUBJECT TO CHANGE BASED UPON FINAL PLAN ISSUANCE FROM THE INDIVIDUAL UTILITY COMPANY. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING PG&E, AND OBTAINING FINAL PLANS PRIOR TO CONSTRUCTION. ADDITIONAL EASEMENTS MAY BE REQUIRED.

CULTURAL RESOURCES:

1. PRIOR TO ISSUANCE OF CONSTRUCTION PERMIT, THE APPLICANT SHALL SUBMIT A MITIGATION/MONITORING PLAN, PREPARED BY A SUBSURFACE-QUALIFIED ARCHAEOLOGIST, FOR THE REVIEW AND APPROVAL BY THE ENVIRONMENTAL COORDINATOR. THE PLAN SHALL INCLUDE CONSIDERATION OF THE PREVIOUS ARCHAEOLOGICAL WORK CONDUCTED FOR THE SITE.

2. DURING ALL GROUND CONSTRUCTION ACTIVITIES, THE APPLICANT SHALL RETAIN A QUALIFIED ARCHAEOLOGIST (APPROVED BY THE ENVIRONMENTAL COORDINATOR) TO IMPLEMENT THE APPROVED MITIGATION/MONITORING PLAN.

3. UPON COMPLETION OF ALL MONITORING/MITIGATION ACTIVITIES, AND PRIOR TO OCCUPANCY OF FINAL INSPECTION (WHICHEVER COMES FIRST), THE CONSULTING ARCHAEOLOGIST SHALL SUBMIT A REPORT TO THE ENVIRONMENTAL COORDINATOR SUMMARIZING ALL MONITORING/MITIGATION ACTIVITIES AND CONFIRMING THAT ALL RECOMMENDED MITIGATION MEASURES HAVE BEEN MET.

4. IN THE EVENT ARCHAEOLOGICAL RESOURCES ARE UNEARTHED OR DISCOVERED DURING ANY CONSTRUCTION ACTIVITIES, THE FOLLOWING STANDARDS APPLY:

A. CONSTRUCTION ACTIVITIES SHALL CEASE, AND THE ENVIRONMENTAL COORDINATOR AND PLANNING DEPARTMENT SHALL BE NOTIFIED SO THAT THE EXTENT AND LOCATION OF DISCOVERED MATERIALS MAY BE RECORDED BY A QUALIFIED ARCHAEOLOGIST, AND DISPOSITION OF ARTIFACTS MAY BE ACCOMPLISHED IN ACCORDANCE WITH STATE AND FEDERAL LAW.

B. IN THE EVENT ARCHAEOLOGICAL RESOURCES ARE FOUND TO INCLUDE HUMAN REMAINS, OR IN ANY OTHER CASE WHERE HUMAN REMAINS ARE DISCOVERED DURING CONSTRUCTION, THE COUNTY CORONER IS TO BE NOTIFIED IN ADDITION TO THE PLANNING DEPARTMENT AND ENVIRONMENTAL COORDINATOR SO THAT PROPER DISPOSITION MAY BE ACCOMPLISHED.

EARTHWORK:

1. EARTHWORK: CUT: 146 CY FILL: 901 CY NET: 755 CY IMPORT
CUT AND FILL QUANTITIES ARE TO BE USED FOR DETERMINING PERMIT FEES ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ACTUAL EARTHWORK QUANTITIES FOR BIDDING PURPOSES. EDA DOES NOT, EXPRESSLY OR BY IMPLICATION, EXTEND ANY WARRANTY FOR EARTHWORK QUANTITIES.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING THE GROUND ELEVATIONS AND OVERALL TOPOGRAPHY OF THE SITE PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY EDA IMMEDIATELY, AND IN WRITING, OF ANY DIFFERENCES IN TOPOGRAPHY FROM THAT SHOWN ON THIS PLAN, WHICH MAY REQUIRE CHANGES IN DESIGN AND/OR AFFECT THE EARTHWORK QUANTITIES.

3. EARTHWORK QUANTITIES AS SHOWN HAVE BEEN CALCULATED FROM EXISTING GROUND, BASED ON THE TOPOGRAPHY SHOWN, TO DESIGN FINISHED GRADE. THE ACTUAL AMOUNT OF EARTH MOVED WILL VARY DEPENDING ON COMPACTION, CONSOLIDATION, STRIPPING AND THE CONTRACTOR'S METHOD OF SITE PREPARATION.

4. THE CONTRACTOR SHALL CALCULATE THE EARTHWORK QUANTITIES TO THEIR SATISFACTION PRIOR TO THE START OF CONSTRUCTION, INCLUDING ALLOWANCE FOR SHRINKAGE, TRENCH SPOILS, STRIPPING, PRE-COMPACTION, AND CONSOLIDATION. NO ADDITIONAL COMPENSATION WILL BE MADE FOR ANY EXPORT OR IMPORT REQUIRED.

5. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNMENT ORDINANCES AND REGULATIONS RELATING TO THE WORK SHOWN ON THIS PLAN.

6. THE PROJECT SOILS REPORT PREPARED BY GEOSOLUTIONS, INC (No. SLO 04813-1) DATED APRIL 25, 2005 AND ALL SUBSEQUENT ADDENDUMS SHALL BE CONSIDERED A PART OF THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION WITHIN THE CONSTRAINTS AS DEFINED BY THESE ITEMS.

7. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER UNLESS OTHERWISE NOTED ON THE PLANS.

8. ALL GRADING SHALL CONFORM TO THE REGULATING AGENCIES GRADING ORDINANCE, STANDARDS, AND SPECIFICATIONS; AND TO THE LATEST EDITION OF THE UNIFORM BUILDING CODE (CHAPTER 33); AND TO THE RECOMMENDATIONS OF THE PROJECT SOILS REPORT.

9. MATERIAL TO BE USED AS BACKFILL OR EMBANKMENT SHALL BE APPROVED BY THE SOILS ENGINEER AND BE FREE OF OBJECTIONABLE MATERIAL SUCH AS TREES, STUMPS, ROOTS, LOGS, OR OTHER DELETERIOUS MATERIAL. THE CONTRACTOR SHALL FOLLOW THE SITE DEVELOPMENT RECOMMENDATIONS OF THE SOILS REPORT.

10. NO GRADING SHALL OCCUR WITHIN TWO (2) FEET OF THE PROPERTY LINES UNLESS NOTED OTHERWISE ON THESE PLANS.

NCSD GENERAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ITEMS SHOWN ON ALL SHEETS OF THE PLANS.

2. ALL CONSTRUCTION WORK AND INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THE LATEST VERSION OF THE SAN LUIS OBISPO COUNTY ENGINEERING DEPARTMENT AND NIPOMO COMMUNITY SERVICES DISTRICT STANDARD SPECIFICATIONS AND DRAWINGS. ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE NIPOMO COMMUNITY SERVICES DISTRICT, AND THE ENGINEER OF RECORD.

3. NO CONSTRUCTION SHALL BE STARTED WITHOUT PLANS APPROVED BY NIPOMO COMMUNITY SERVICES DISTRICT.

4. A COUNTY ENCROACHMENT PERMIT IS REQUIRED FOR ALL WORK DONE WITHIN THE COUNTY RIGHT-OF-WAY AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN.

5. AN INSPECTION AGREEMENT WITH THE NIPOMO COMMUNITY SERVICES DISTRICT IS REQUIRED PRIOR TO THE START OF CONSTRUCTION.

6. NIPOMO COMMUNITY SERVICES DISTRICT HAS CONSTRUCTION APPROVAL AUTHORITY REGARDING WATER AND SEWER IMPROVEMENTS SHOWN HEREIN.

7. ALL WATERLINE SHUTDOWNS SHALL BE PERFORMED BY NIPOMO COMMUNITY SERVICES DISTRICT (NCSD) PERSONNEL. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF FORTY-EIGHT (48) HOUR NOTICE TO NCSD.

8. THE CONTRACTOR SHALL PROVIDE DUST CONTROL DURING ALL PHASES OF THE WORK.

9. THE CONSTRUCTION CONTRACTOR SHALL MAINTAIN A CURRENT, COMPLETE AND ACCURATE RECORD OF ALL CHANGES WHICH DEVIATE FROM THE CONSTRUCTION AS PROPOSED IN THESE PLANS AND SPECIFICATIONS FOR THE PURPOSE OF PROVIDING THE ENGINEER WITH A BASIS FOR RECORD DRAWINGS. NO CHANGES SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE NIPOMO COMMUNITY SERVICES DISTRICT AND THE DESIGN ENGINEER.

10. PEDESTRIAN ACCESS SHALL BE AFFORDED THROUGH THE WORK AREA EITHER BY PROVIDING NECESSARY FACILITIES FOR SAFE AND VIABLE ACCESS, OR BY PROVIDING APPROPRIATE ADVANCE WARNING TO PEDESTRIANS TO UTILIZE ALTERNATE ROUTES. FOR BOTH PEDESTRIANS AND BICYCLES, SURFACES SHALL BE MAINTAINED FREE OF LOOSE DEBRIS OR GRAVEL.

TREE REMOVAL NOTE:

1. PRIOR TO COMMENCEMENT OF TREE REMOVAL ASSOCIATED WITH THIS DEVELOPMENT, TO AVOID CONFLICTS WITH NESTING RAPTORS, CONSTRUCTION ACTIVITIES SHALL NOT BE ALLOWED DURING THE NESTING SEASON (MARCH TO JULY), UNLESS A COUNTY-APPROVED, QUALIFIED BIOLOGIST HAS SURVEYED THE IMPACT ZONE AND DETERMINED THAT NO NESTING ACTIVITIES WILL BE ADVERSELY IMPACTED. AT SUCH TIME, IF ANY EVIDENCE OF NESTING ACTIVITIES ARE FOUND, THE BIOLOGIST WILL DETERMINE IF ANY CONSTRUCTION ACTIVITIES CAN OCCUR DURING THE NESTING PERIOD AND TO WHAT EXTEND. THE RESULTS OF THE SURVEYS WILL BE PASSED IMMEDIATELY TO THE COUNTY (ENVIRONMENTAL DIVISION), POSSIBLY WITH RECOMMENDATIONS FOR VARIABLE BUFFER ZONES, AS NEEDED, AROUND INDIVIDUAL NESTS.

SURVEY DATA

BENCHMARK:
1/2 REBAR WITH CAP, LS 4819, LOCATED AT THE SOUTHERLY PROPERTY CORNER. ELEVATION 355.07' TIED TO BENCHMARK AT HIGHWAY 101 AND TEFFT STREET NEAR VONS SHOPPING CENTER, SINCE DESTROYED.

BASIS OF BEARING:
BEARINGS FOR THIS MAP ARE BASED ON THE RELATIONSHIP OF FOUND MONUMENTS ON THE CENTERLINE OF SANDYDALE DRIVE, SAID BEARING BEING N 48°06'37" E PER R1.

NCSD CONSTRUCTION NOTES:

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST VERSION OF THE NIPOMO COMMUNITY SERVICES DISTRICT (NCSD) STANDARDS AND SPECIFICATIONS, AND ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE NCSD MANAGER.

2. NO CONSTRUCTION SHALL BE STARTED WITHOUT PLANS APPROVED AND SIGNED BY NCSD.

3. A CHECKING AND INSPECTION AGREEMENT WITH NCSD IS REQUIRED PRIOR TO THE COMMENCEMENT OF WORK.

4. NCSD HAS CONSTRUCTION APPROVAL AUTHORITY OVER WATER AND SEWER IMPROVEMENTS SHOWN HEREIN.

5. ALL WATERLINE SHUT DOWNS SHALL BE PERFORMED BY NCSD PERSONNEL. A MINIMUM OF 48 HOURS WRITTEN NOTICE SHALL BE GIVEN TO NCSD PRIOR TO ANY SHUTDOWN.

6. THE CONTRACTOR'S ATTENTION IS DIRECTED TO NCSD STANDARD 2.04J, WHICH REQUIRES THE PREPARATION OF ACCURATE AS-BUILT DRAWINGS PRIOR TO WORK ACCEPTANCE.

7. IT IS UNLAWFUL TO OPEN OR DRAW WATER FROM A FIRE HYDRANT WITHOUT PERMISSION FROM NIPOMO COMMUNITY SERVICES DISTRICT.

ABBREVIATIONS

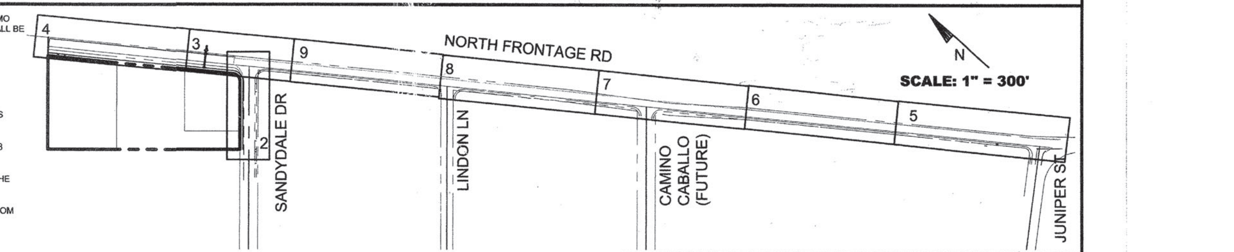
AB - AGGREGATE BASE
ABN - ABANDON
AC - ASPHALT CONCRETE
ADJ - ADJUST
ANG - ANGLE
ASSY - ASSEMBLY
AV - AIR VACUUM
BM - BENCHMARK
BVC - BEGIN VERTICAL CURVE
BW - BACK OF WALK (GRADE)
CA - CALTRANS SIGN NUMBER
CATV - CABLE TELEVISION (LINE)
CB - CATCH BASIN
CL - CENTERLINE
CLF - CHAIN LINK FENCE
CMU - CONCRETE MASONRY UNIT
CO - CLEAN OUT
COM - COMMUNICATIONS
CONC - CONCRETE
CONST - CONSTRUCT
CSP - CORRUGATED STEEL PIPE
DG - DECOMPOSED GRANITE
D/W - DRIVEWAY
DDCV - DOUBLE DETECTOR CHECK VALVE
(E) - EXISTING
ELEC - ELECTRICAL
ELEV - ELEVATION
EP - EDGE OF PAVEMENT
ESMT - EASEMENT
ETW - EDGE OF TRAVELED WAY
EVC - END VERTICAL CURVE
EXIST - EXISTING
FDC - FIRE DEPARTMENT CONNECTION
FG - FINISHED GRADE
FH - FIRE HYDRANT
FL - FLOW LINE
FLE - FLOW LINE EAST
FLN - FLOW LINE NORTH
FLS - FLOW LINE SOUTH
FLW - FLOW LINE WEST
FNC - FENCE
FS - FINISHED SURFACE (PAVEMENT)
FUT - FUTURE
G - GAS (LINE)
GB - GRADE BREAK
GM - GAS METER
GP - GRADING PLAN
GR - GRATE
GTR - GUTTER
HORZ - HORIZONTAL
HP - HIGH POINT
HW - HEADWALL
JB - JUNCTION BOX
JP - JOINT POLE
LAT - LATERAL
LF - LINEAR FEET
LP - LOW POINT
LT - LEFT
MAX - MAXIMUM
MH - MANHOLE
MIN - MINIMUM
MON - MONUMENT
OG - ORIGINAL GROUND
OHW - OVERHEAD WIRE
OS - ORIGINAL SURFACE
SHT - SHEET
TBA - TO BE ABANDONED
TBR - TO BE REMOVED
TBP - TO BE PROTECTED
TC - TOP OF CURB
TEL - TELEPHONE
TEMP - TEMPORARY
TF - TOP OF FOOTING
TG - TOP OF GRATE
TYP - TYPICAL
TW - TOP OF WALL
UD - UNDER DRAIN
UG - UNDERGROUND
UP - UTILITY POLE
VERT - VERTICAL
VC - VERTICAL CURVE
VCP - VITRIFIED CLAY PIPE
VLT - VAULT
VLV - VALVE
WL - WATER LINE
WM - WATER METER BOX
WS - WATER SERVICE
WSL - WATER SERVICE LINE
WV - WATER VALVE
WW - WING WALL
WWM - WELDED WIRE MESH
± - APPROXIMATE
Ø - DIAMETER

LEGEND

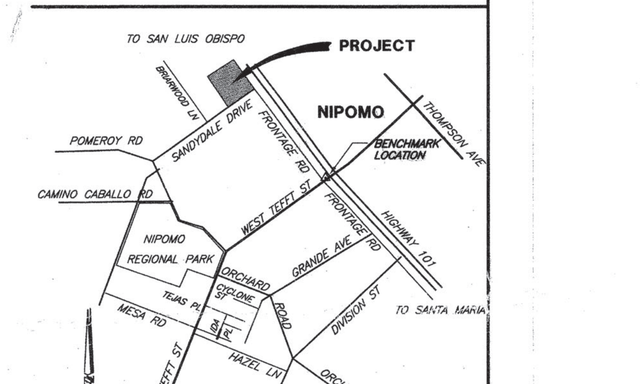
PROPOSED / EXISTING

DROP INLET
CURB & GUTTER
ASPHALT DIKE
EDGE OF PAVEMENT
MAJOR CONTOUR (100 / (100))
MINOR CONTOUR (101 / (101))
WATER VALVE
FIRE HYDRANT
WATER METER
MANHOLE
JUNCTION POLE
UTILITY GUY
STREET LIGHT
STREET SIGN
TRANSFORMER
TREE
SAWCUT LINE
PROJECT BOUNDARY & ROW
ADJACENT BOUNDARY & ROW
LOT LINE & ROW
EASEMENT
CENTERLINE
NEW FENCE CHAIN
EXISTING FENCE CHAIN
NEW FENCE WIRE
EXISTING FENCE WIRE
EXISTING WALL
NEW WALL
NEW RETAINING WALL
NEW WATERLINE
EXISTING WATERLINE
NEW SEWER LINE
EXISTING SEWER LINE
NEW STORM DRAIN
EXISTING STORM DRAIN
NEW GAS LINE
EXISTING GAS LINE
EXISTING OH WIRE
NEW WIRE UTILITY
EXISTING WIRE UTILITY
FUTURE IMPROVEMENTS (LABELED PER PLAN)
PATH OF TRAVEL
TRAIL

SHEET INDEX MAP



VICINITY MAP



SHEET INDEX

REGISTERED PROFESSIONAL ENGINEER
JEFFREY P. WAGNER
No. 26431
Exp. 3/31/06
CIVIL
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
RICHARD E. MARSHALL
No. 47574
Exp. 12/31/05
CIVIL
STATE OF CALIFORNIA

APPROVED
THIS IS NOT A PERMIT
CDF/SAN LUIS OBISPO COUNTY FIRE DEPARTMENT
8/1/05
The approval of these plans shall not be construed to permit violation of any county ordinance or State Law, and shall not prevent the County of San Luis Obispo from requiring correction of errors or ommissions in plans, specification, or construction. A set of these approved plans shall be kept on the job site at all times.

RECEIVED
NOV 29

REVIEWED BY NIPOMO COMMUNITY SERVICES DISTRICT	Michael LeBrun — DATE 9-8-05
REVIEWED BY P.G.& E.	DATE 8-9-05
REVIEWED BY SBC	DATE 7/26/05
REVIEWED BY CHARTER COMMUNICATION	DATE 7-27-05
REVIEWED BY THE GAS COMPANY	Clark Talbert — DATE 08-04-05
	DATE
	DATE
	DATE

REVISIONS

DATE	DESCRIPTION	APPRVD

PROJECT DATA:
EDA JOB No: 2.2934.100
CONTACT: MIKE BERTACCINI

eda — civil engineers • land surveyors • land planners
1998 santa barbara st • san luis obispo, ca 93401
ph: 805/549-8658 • email: eda@edainc.com

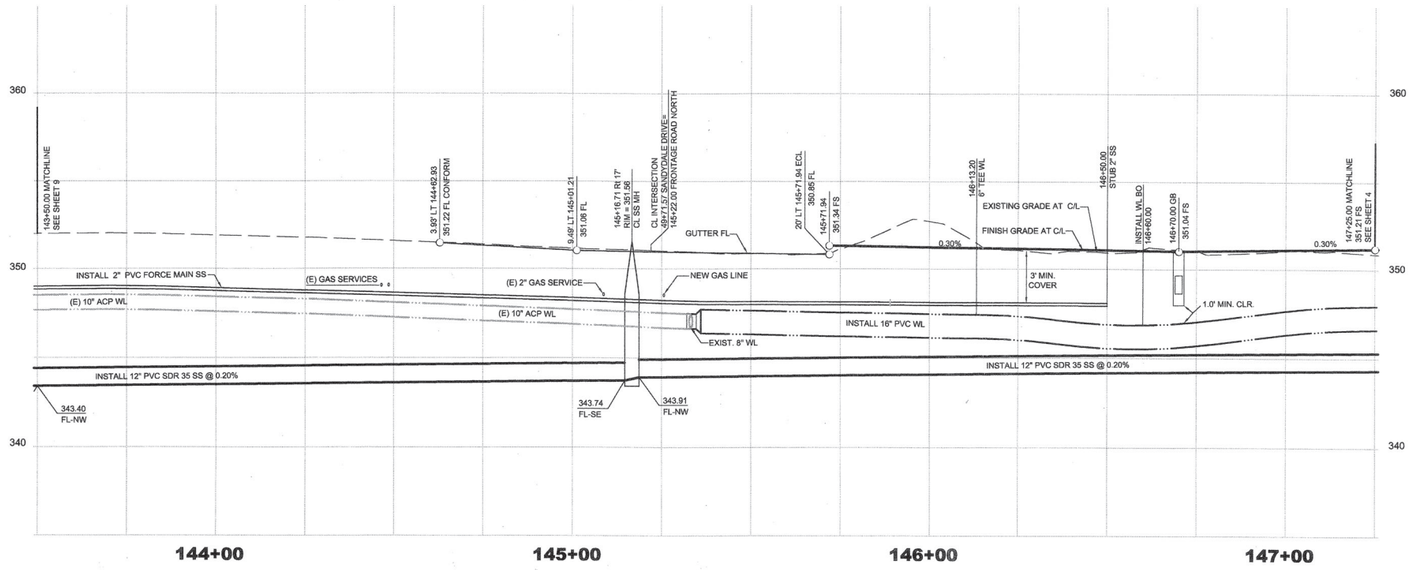
PUBLIC IMPROVEMENT PLANS FOR
CO - 03-0301

TITLE SHEET

Design/Drawn	County Plan Check	APPROVED FOR COUNTY REQUIREMENTS	
	GDM 10.14.05	Development Services Engineer	Date 11/1/05
Job No. 2.2934.100	County W.O. No. 201 RII-E396	Principal Engineer	Date 10.3.05
California Coordinates N 570	E 1252		Sheet 1 of 19

K:\22934100\3-Con Docs\public\22934100PP01 - TITLE SHEET.dwg 7/25/05 01:31 PM BretR

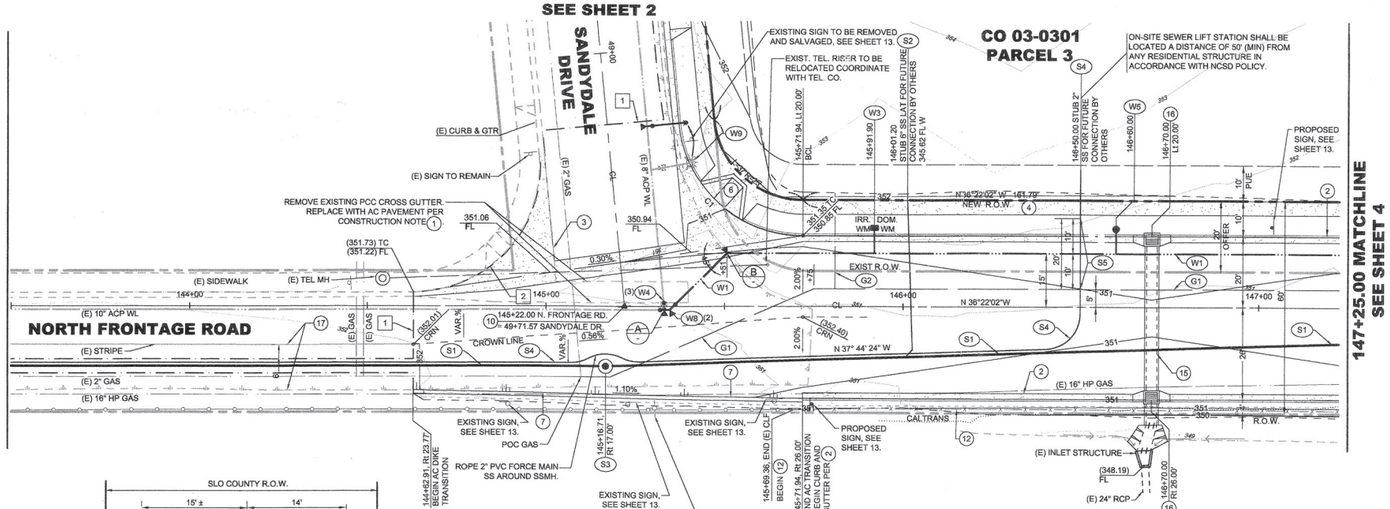
9-15-05 10-12-05



PROFILE

SCALE: 1"=20' HORIZONTAL
1"=4' VERTICAL

SEE SHEET 2

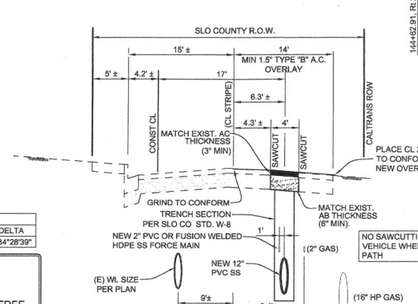


PLAN

SCALE: 1"=20' HORIZONTAL

NOTE:
REMOVE EXISTING TREE ROOTBALLS WITHIN AREA OF CONSTRUCTION. A BURIED 16" GAS LINE IS PRESENT WITHIN THE NORTH FRONTAGE ROAD RIGHT OF WAY. THE GAS LINE LIES UNDER THE PROPOSED ROADWAY STRUCTURAL SECTION AND WILL PASS UNDER DRAINAGE CULVERT AS SHOWN ON THE IMPROVEMENT PLANS. AN AUTHORIZED GAS COMPAINY REPRESENTATIVE SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY CONSTRUCTION OR GRADING OPERATIONS WITHIN 10' LEFT AND RIGHT (20' TOTAL WIDTH) OF THE GAS LINE AS LOCATED IN THE FIELD. AUTHORIZED GAS CO. PERSONNEL SHALL BE ONSITE TO OBSERVE ALL OPERATIONS WITHIN THE ABOVE STATED TOLERANCE ZONE.

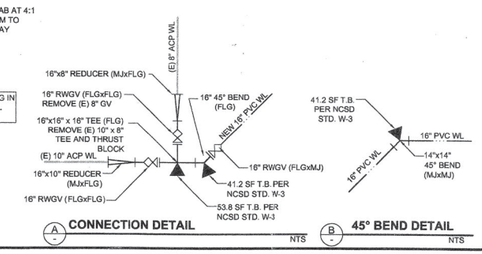
NOTE TO CONTRACTOR:
A CALTRANS ENCROACHMENT PERMIT IS REQUIRED PRIOR TO WORKING ON/WITHIN THE CALTRANS ROW.



TYPICAL EXIST. STREET SECTION: NORTH FRONTAGE RD
STA 131+67.59 TO STA 144+62.91
SCALE: 1"=10' HORZ
NTS VERT

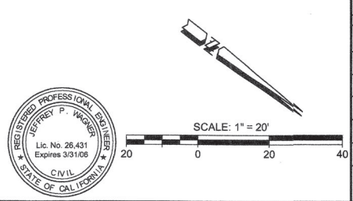
NO SAWCUTTING IN VEHICLE WHEEL PATH

CURVE TABLE				
CURVE	LENGTH	RADIUS	TANGENT	DELTA
C1	51.60	35.00	31.78	84°28'39"



A CONNECTION DETAIL — NTS

B 45° BEND DETAIL — NTS



DEMOLITION NOTES:

1. SAWCUT AND REMOVE EXISTING AC PAVEMENT (SEE GENERAL CONSTRUCTION NOTE NUMBER 19, SHEET 1).
2. SAWCUT AND REMOVE EXISTING CONCRETE IMPROVEMENTS.
3. REMOVE EXISTING SIGN.

ROAD CONSTRUCTION NOTES:

1. CONSTRUCT 3" AC OVER 6" CLII AB PAVEMENT SECTION OR MATCH EXISTING SECTION, WHICHEVER IS GREATER.
2. CONSTRUCT TYPE 'A' CURB AND GUTTER PER SLO COUNTY STD. C-1.
3. CONSTRUCT NEW 3" X 12" RECTANGULAR CAST IRON PIPE SIDEWALK UNDER DRAIN PER DETAIL "A", SHEET 16.
4. CONSTRUCT CONCRETE SIDEWALK PER SLO COUNTY STD. B-5.
5. CONSTRUCT CONCRETE DRIVEWAY PER SLO COUNTY STD. B-3, SHEET 14, MODIFIED TO 8" THICK CONCRETE PLUS STEEL.
6. CONSTRUCT ACCESS RAMP PER CALTRANS STD. RSP A-88A, CASE "E".
7. CONSTRUCT AC DIKE PER SLO COUNTY STD. C-1 WITH AR16000 BINDER.
8. INSTALL REDWOOD HEADER PER DETAIL "D", SHEET 16.
9. CONSTRUCT WOOD BEAM BARRICADE PER SLO COUNTY STD. M-5.
10. CONSTRUCT STANDARD STREET MONUMENT PER SLO COUNTY STD. M-1.
11. BACK FILL AND REPLACE PAVEMENT PER NCSD STD W-8 AND SLO CO TYPICAL UTILITY TRENCH DETAIL.
12. REMOVE EXISTING BARBED WIRE FENCE AND CONSTRUCT 6' CHAIN LINK FENCE PER CALTRANS STANDARD PLAN A85.
13. CONSTRUCT TEMPORARY AC CURB RAMP AT 12:1 MAX SLOPE TO CONFORM EDGE OF SIDEWALK TO EXISTING GRADE.
14. CONSTRUCT TEMPORARY WOOD RETAINING WALL PER DETAILL "C", SHEET 16.
15. CONSTRUCT STORM DRAIN SYSTEM PER DETAIL "C", SHEET 17.
16. CONSTRUCT STORM DRAIN INLET PER SLO COUNTY STD. C-3.
17. GRIND TO CONFORM AND INSTALL 1.5" MIN TYPE "B" A.C. OVERLAY.

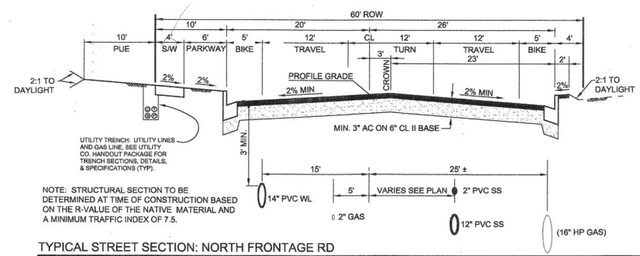
S1. CONSTRUCT 12" PVC SDR35 SANITARY SEWER PER NCSD STD W-8.
S2. CONSTRUCT 6" PVC SDR35 SANITARY SEWER LATERAL PER NCSD STD. S-5 AND NCSD STD W-8.
S3. CONSTRUCT SANITARY SEWER MANHOLE PER NCSD STD. S-2.
S4. CONSTRUCT 2" SCHEDULE 80 PVC OR FUSION WELDED HDPE FORCE MAIN SANITARY SEWER PER NCSD STD W-8.
S5. INSTALL 20' OF CONTINUOUS PIPE CENTERED OVER WATERLINE WITH 4" C900 PVC SLEEVE.

W1. CONSTRUCT 16" PVC C905 WATER LINE (CLASS 150) PER NCSD STD W-8
W2. INSTALL FIRE HYDRANT PER NCSD W-1.
W3. CONSTRUCT 2" WATER SERVICE & TEE FOR 1" WATER METERS PER NCSD W-4.
W4. INSTALL 16" BUTTERFLY GATE VALVE AND ANCHOR (PRATT GROUNDHOG VALVE OR APPROVED EQUAL TO BE SUBMITTED TO NCSD PRIOR TO INSTALLATION).
W5. INSTALL 4" BLOW OFF ASSEMBLY PER NCSD STD W-7(A).
W6. INSTALL 6" PVC C900 (CLASS 150) WATERLINE, CAP 3' BEYOND ROW.
W7. INSTALL 6" GATE VALVE AND ANCHOR PER NCSD STD. W-2.
W8. INSTALL THRUST BLOCK PER NCSD STD. W-3.
W9. RELOCATE EXISTING FIRE HYDRANT. INSTALL PER NCSD STD. W-1.
W10. CONSTRUCT 1" WATER SERVICE PER NCSD STD. W-4.
W11. INSTALL 1" AIR AND VACUUM RELIEF ASSEMBLY PER NCSD STD W-5.

G1. INSTALL GAS LINE PER UTILITY COMPANY'S PLANS.
G2. INSTALL GAS SERVICE PER UTILITY COMPANY'S PLANS.

SEWER CONSTRUCTION NOTES:

1. UPON COMPLETION OF SEWER LINE CONSTRUCTION THE ENTIRE TRAVEL LANE SHALL BE OVERLAID (0.13' MIN AC). CONTRACTOR SHALL GRIND ALL CONFORMS, NO PAVEMENT FEATHERING SHALL BE ALLOWED.
2. NO WORK ALONG NORTH FRONTAGE RD SHALL COMMENCE PRIOR TO 8:30 AM.
3. ALL REMOVED OR DAMAGED STRIPING SHALL BE REPLACED IN KIND PER MUTCD AND CALIFORNIA SUPPLEMENT.



NOTE: STRUCTURAL SECTION TO BE DETERMINED AT TIME OF CONSTRUCTION BASED ON THE R-VALUE OF THE NATIVE MATERIAL AND A MINIMUM TRAFFIC INDEX OF 7.5.

TYPICAL STREET SECTION: NORTH FRONTAGE RD
STA 145+71.94 TO STA 151+84.66
SCALE: 1"=10'

BENCHMARK:
1/2 REBAR WITH CAP, LS 4819, LOCATED AT THE SOUTHERLY PROPERTY CORNER. ELEVATION 355.07' TIED TO BENCHMARK AT HIGHWAY 101 AND TEFFT STREET NEAR VONS SHOPPING CENTER, SINCE DESTROYED.

DIGALERT
DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF CALIFORNIA

REVISIONS		
DATE	DESCRIPTION	APPRVD

eda
civil engineers • land surveyors • land planners
1998 santa barbara st • san luis obispo, ca 93401
ph: 805/549-8658 • email: eda@edainc.com

PUBLIC IMPROVEMENT PLANS FOR
CO - 03-0301
STREET AND SEWER IMPROVEMENTS FOR N. FRONTAGE ROAD
STA 143+50 TO STA 147+25

Design/Drawn	County Plan Check GDM 10-14-05	APPROVED FOR COUNTY REQUIREMENTS
		Development Services Engineer — Date
Job No. 2.2934.100	County W.O. No. 201 RII-E396	Principal Engineer — Date 10-3-05
PROJECT DATA: DATE: OCTOBER 3, 2005 EDA JOB No: 2.2934.100 CONTACT: MIKE BERTACCINI	California Coordinates N 570 E 1252	Sheet 3 of 19

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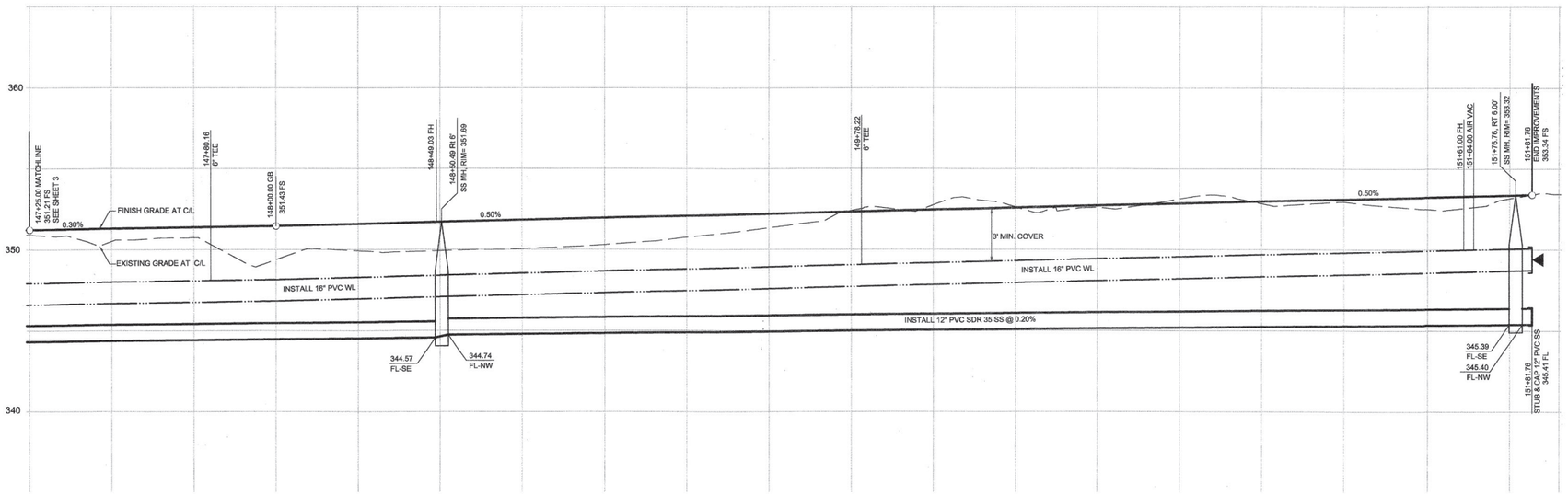

PROFILE

SCALE: 1"=20' HORIZONTAL
1"=4' VERTICAL

DEMOLITION NOTES:

1. SAWCUT AND REMOVE EXISTING AC PAVEMENT (SEE GENERAL CONSTRUCTION NOTE NUMBER 19, SHEET 1).
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G1. INSTALL GAS LINE PER UTILITY COMPANY'S PLANS.
G2. INSTALL GAS SERVICE PER UTILITY COMPANY'S PLANS.

NOTE TO CONTRACTOR:
THE CONTRACTOR SHALL SECURE WRITTEN APPROVAL TO WORK IN RHO NIPOMO PTN LT 23 NIP RES TR PTN LT 17.

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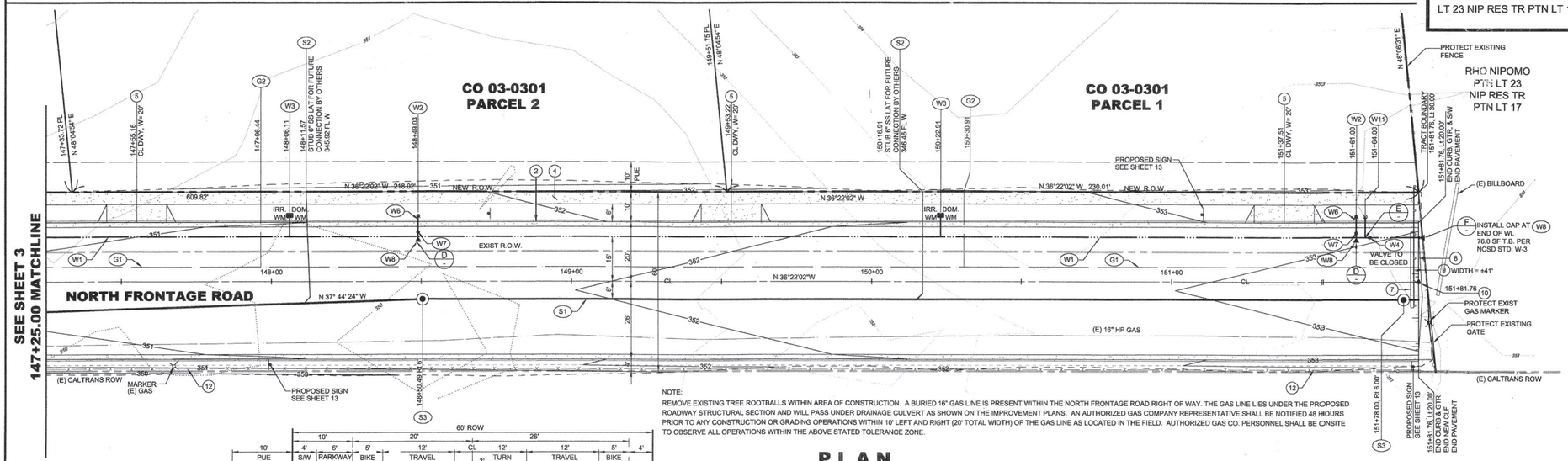
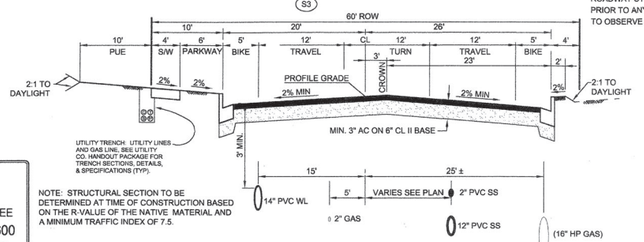


NOTE:
REMOVE EXISTING TREE ROOTBALLS WITHIN AREA OF CONSTRUCTION. A BURIED 16" GAS LINE IS PRESENT WITHIN THE NORTH FRONTAGE ROAD RIGHT OF WAY. THE GAS LINE LIES UNDER THE PROPOSED ROADWAY STRUCTURAL SECTION AND WILL PASS UNDER DRAINAGE CULVERT AS SHOWN ON THE IMPROVEMENT PLANS. AN AUTHORIZED GAS COMPANY REPRESENTATIVE SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY CONSTRUCTION OR GRADING OPERATIONS WITHIN 10' LEFT AND RIGHT (20' TOTAL WIDTH) OF THE GAS LINE AS LOCATED IN THE FIELD. AUTHORIZED GAS CO. PERSONNEL SHALL BE ONSITE TO OBSERVE ALL OPERATIONS WITHIN THE ABOVE STATED TOLERANCE ZONE.

PLAN

SCALE: 1"=20' HORIZONTAL



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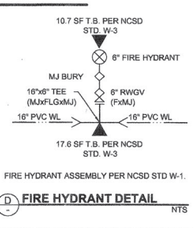
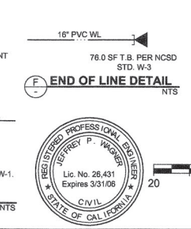
STA 145+71.94 TO STA 151+84.66
SCALE: 1"=10'



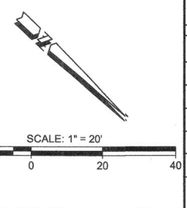
FIRE HYDRANT ASSEMBLY PER NCSD STD W-1.

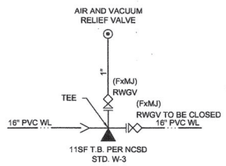
D - FIRE HYDRANT DETAIL NTS



F - END OF LINE DETAIL NTS

REGISTERED PROFESSIONAL ENGINEER
JEFFREY P. WALKER
Lic. No. 26,431
Expires 3/31/08
CIVIL
STATE OF CALIFORNIA





E - AIR AND VACUUM RELIEF ASSEMBLY NTS

BENCHMARK:
1/2 REBAR WITH CAP, LS 4819, LOCATED AT THE SOUTHERLY PROPERTY CORNER. ELEVATION 355.07' TIED TO BENCHMARK AT HIGHWAY 101 AND TEFFT STREET NEAR VONS SHOPPING CENTER, SINCE DESTROYED.

DIGALERT
DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF CALIFORNIA

REVISIONS		
DATE	DESCRIPTION	APPRVD

PROJECT DATA:
DATE: OCTOBER 3, 2005
EDA JOB No: 2.2934.100
CONTACT: MIKE BERTACCHINI

eda
civil engineers • land surveyors • land planners
1998 santa barbara st • san luis obispo, ca 93401
ph: 805/549-8500 • email: eda@edainc.com

PUBLIC IMPROVEMENT PLANS FOR
CO - 03-0301
STREET AND SEWER IMPROVEMENTS FOR N FRONTAGE ROAD
STA 147+25 TO END

Design/Drawn	County Plan Check	APPROVED FOR COUNTY REQUIREMENTS
	GDM 10-14-05	Development Services Engineer — Date
Job No. 2.2934.100	County W.O. No. 201 RII-E396	Principal Engineer — 10.3.05 Date
California Coordinates N 570 E 1252		Sheet 4 of 19

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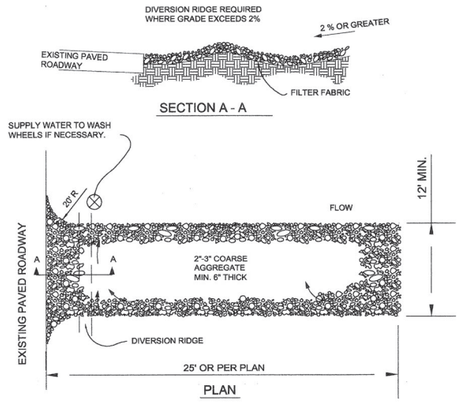
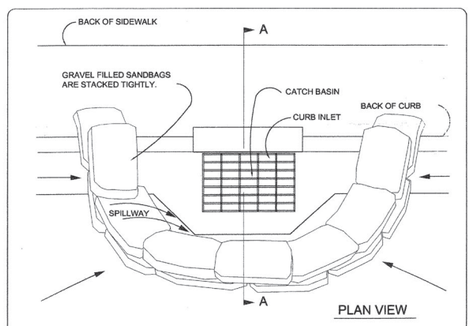


NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

A GRAVEL CONSTRUCTION ENTRANCE & EXIT DETAIL

NTS



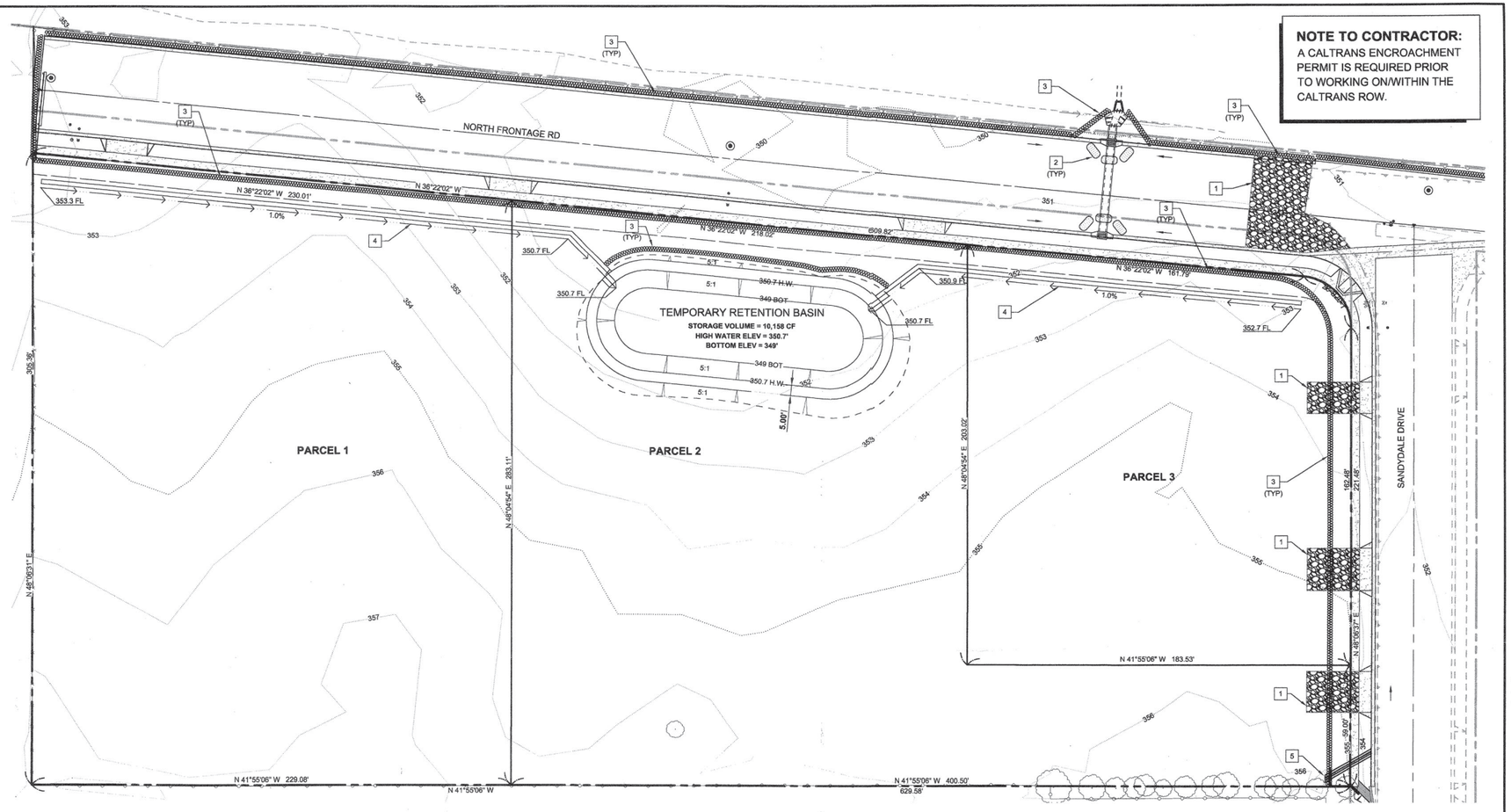
NOTES:
1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. SANDBAGS, OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC, ARE FILLED WITH GRAVEL, LAYERED AND PACKED TIGHTLY.
3. LEAVE ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

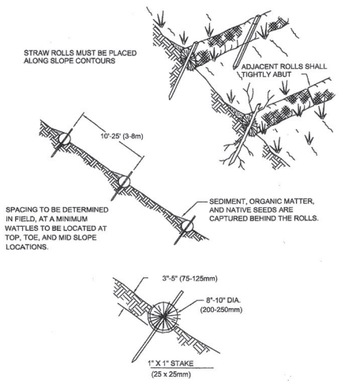
CURB INLET SEDIMENT BARRIER

FILE: SEDIM10

B GRAVEL BAG DROP INLET SEDIMENT BARRIER

SCALE: NTS

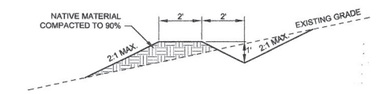




NOTE:
1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3"-5" (75-125mm) DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.

C STRAW ROLL (WATTLE) DETAIL

NTS



D TEMPORARY BERM DETAIL

NTS

CONSTRUCTION NOTES:

1. CONSTRUCT GRAVEL CONSTRUCTION ENTRANCE/ EXIT PER DETAIL "A", THIS SHT.
2. CONSTRUCT GRAVEL FILLED SANDBAG SEDIMENT BARRIER PER DETAIL "B", THIS SHT.
3. INSTALL STRAW WATTLE PER DETAIL "C", THIS SHT.
→ FINISHED SURFACE FLOW DIRECTION.
4. CONSTRUCT TEMPORARY BERM AND SWALE PER DETAIL "D" THIS SHEET
5. BLOCK ENDS OF PIPES WITH PLYWOOD AND SANDBAGS

SCALE: 1" = 30'

30 0 30 60

REVISIONS			
DATE	DESCRIPTION	APPRVD	

PROJECT DATA:
DATE: OCTOBER 3, 2005
EDA JOB No: 2.2934.100
CONTACT: MIKE BERTACCINI

eda
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ph: 805/549-8658 • email: eda@edainc.com

PUBLIC IMPROVEMENT PLANS FOR
CO - 03-0301

EROSION CONTROL & BASIN PLAN

Design/Drawn	County Plan Check	APPROVED FOR COUNTY REQUIREMENTS
	GDM 10-14-05	Development Services Engineer — Date
Job No.	County W.O. No.	
2.2934.100	201 RII-E396	Principal Engineer — Date 10-3-05
California Coordinates		Sheet 11
N 570	E 1252	of 19

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