Appendix A

Initial Study and comments received on the Notice of Preparation



INITIAL STUDY FOR THE

Susanville Travel Stop Project

Prepared for:

City of Susanville

January 2025

INITIAL STUDY FOR THE

Susanville Travel Stop Project

Prepared for:

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LIST OF ABBREVIATIONS

AB 52	Assembly Bill 52
AB	Assembly Bill
ACT	Advanced Clean Trucks
ADA	Americans with Disabilities Act
AFY	acre-feet per year
APCD	Lassen County Air Pollution Control District
APN	Assessor's Parcel Number
applicant	Lane Engineers, Inc
AR4	Fourth Assessment Report
AST	aboveground storage tanks
ATCM	Airborne Toxic Control Measure
BMP	best management practice
BUG	Backlight-Uplight-Glare
C-2	General Commercial/Shopping Center District
CAAQS	California Ambient Air Quality Standards
CalEPA	California Environmental Protection Agency
CalGEM	California Geologic Energy Management Division
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CH_4	Methane
CHP	California Highway Patrol
CMTP	Construction Management and Traffic Plan
CNEL	Community Noise Equivalent Level
CO_2	Carbon Dioxide
CO_2e	CO_2 Equivalents
C-R	Regional Commercial

CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
DTSC	Department of Toxic Substances Control
EF	Emergency Function
EIR	Environmental Impact Report
EV	electric vehicle
FAA	Federal Aviation Administration
Farmland	Farmland of Statewide Importance
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
gpd	gallons per day
GWP	global warming potential
HFC	hydrofluorocarbon
HMBEP	Hazardous Materials Business Emergency Plan
HMTA	Hazardous Materials Transportation Act
HVAC	heating, ventilation, and air conditioning
IESNA	Illuminating Engineering Society of North America
IPCC	United Nations Intergovernmental Panel on Climate Change
IS	Initial Study
LAFCO	Local Agency Formation Commission
LED	light-emitting diode
LMOP	Landfill Methane Outreach Program
LMUD	Lassen Municipal Utility District
LRSWMA	Lassen Regional Solid Waste Management Authority
LRWQCB	Lahontan Regional Water Quality Control Board
LSAA	Lake or Streambed Alteration Agreement
mgd	million gallons per day
M-L	Limited Industrial District
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons

msl	mean sea level
MT	metric ton
$MTCO_2e$	Metric Tons of CO_2 equivalents
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	California Native American Heritage Commission
NEIC	Northeast Information Center
NHTSA	National Highway Traffic Safety Administration
NPDES	National Pollutant Discharge Elimination System
PDF	Project Design Feature
PFC	perfluorocarbon
PFYC	Potential Fossil Yield Classification
PM_{10}	particulate matter smaller than or equal 10 microns in diameter
$PM_{2.5}$	particulate matter smaller than or equal to 2.5 microns in diameter
Qa	alluvium
Qpl	Lake Lahontan
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
ROW	right-of-way
RPS	State's Renewables Portfolio Standard
RV	recreational vehicle
RWQCB	Regional Water Quality Control Board
Scoping Plan	CARB's 2022 Scoping Plan for Achieving Carbon Neutrality
SF	square foot
SF_6	Sulfur Hexafluoride
SFD	Susanville Fire Department
SLF	Sacred Lands File
SMARA	California's Surface Mining and Reclamation Act of 1975
SPD	Susanville Police Department
SR	State Route
STAA	Surface Transportation Assistance Act

SWIS	Solid Waste Information System
SWRCB	State Water Resources Control Board
the city	City of Susanville
the project	Susanville Travel Stop Project
tpd	tons per day
UCMP	University of California Museum of Paleontology
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UWMP	Susanville's Urban Water Management Plan
VMT	vehicle miles traveled
WWTP	Wastewater Treatment Plant
ZEV	zero-emission vehicle

1 INTRODUCTION

The following Initial Study (IS) has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (14 CCR Section 15000 et seq.). CEQA serves as the main framework of environmental law and policy in California and emphasizes the need for public disclosure and identifying and preventing significant environmental impacts associated with proposed projects where feasible. Unless a project is deemed statutorily or categorically exempt, or exempt pursuant to the "common sense" exemption, CEQA is applicable to any discretionary project that must be approved by a public agency in order to be processed and established. The Susanville Travel Stop Project (the project) considered herein does not fall under any of the exemptions found in the 2025 CEQA Statutes or the 2018 Guidelines; therefore, it must meet CEQA requirements.

The intent of this document is to provide an overview and analysis of the environmental impacts associated with the project by the City of Susanville (the city), acting as the lead agency in order to understand if any potentially significant impacts could occur due to construction or operation. The city intends to use the conclusions herein to determine which categories of impacts will be addressed at length in the main body of the upcoming Draft EIR for the project and which categories of impacts need only be discussed in this IS, which will be attached (as updated or refined, if need be) as an appendix to the Draft EIR.

1.1 DOCUMENT ORGANIZATION

This IS is organized as follows:

- Chapter 1: Introduction. This chapter introduces the environmental review process.
- Chapter 2: Environmental Checklist. This chapter presents an analysis of a range of environmental issues identified in the CEQA Environmental Checklist (Appendix G of the State CEQA Guidelines). The CEQA Environmental Checklist considers, for each environmental topic, whether the project would result in no impact, a less-than-significant impact, a less-than-significant impact with mitigation incorporated, or a potentially significant impact.
- Chapter 3: References. This chapter lists the references used in preparation of this IS.
- Chapter 4: Report Preparers. This chapter lists the authors of each chapter and section.
- Appendices. The appendices provide additional information and provide detailed technical information used in the preparation of this IS.

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2 ENVIRONMENTAL CHECKLIST

2.1 PROJECT INFORMATION

1. **Project Title:** Susanville Travel Stop

2. **Lead Agency Name and Address:** City of Susanville
   66 N Lassen St
   Susanville, CA 96130

3. **Contact Person and Phone Number:** Dan Newton
   (530) 252-5106
   dnewton@cityofsusanville.org

4. **Project Location:** The project site is located on an approximate 14.15-acre vacant parcel situated to the southeast of the City of Susanville (project site) (Figure 2-1). The project site is located in an area within the unincorporated territory of Lassen County that is proposed for annexation into the City of Susanville in the City of Susanville General Plan. The project site is part of a larger 79.6-acre parcel (Assessor's Parcel Number [APN] 107-280-017), located immediately south of Susanville city limits and west of State Route (SR) 36 (Figure 2-2), although the remainder of the parcel would remain undeveloped.

5. **Project Sponsor's Name and Address:** Lane Engineers, Inc.
   979 North Blackstone Street
   Tulare, CA 93274

6. **General Plan Designation:** The current Lassen County General Plan and Area Plan Land Use designation for the project site, which is within the Susanville Vicinity Area Plan area, is Industrial Park. The Industrial Park designation is for limited industrial uses to be designed and laid out as a planned development with on-site services. The project applicant proposes that the City amend the General Plan to show a Commercial Shopping Center designation on the property.

7. **Zoning:** The Lassen County General Plan and Susanville Vicinity Area Plan area indicates principal land use designations and typical zoning districts or combinations of zoning districts which correspond to the designations. The project site has a typical corresponding zoning district of Limited Industrial District (M-L). The project applicant proposes that the City amend the zoning to show a General Commercial Shopping District (C-2) designation on the property.

8. **Description of Project:**

Lane Engineers, Inc (applicant) is proposing to construct for operation a full-service travel stop (project) on approximately 14.15 acres of vacant land to the southeast of the City of Susanville (project site) (Figure 2-1). The project site is located in unincorporated territory of Lassen County that would is proposed for annexation into the City of Susanville in the City of Susanville General Plan. The project site is part of a larger 79.6-acre parcel (APN 107-

280-017), located immediately south of Susanville city limits and west of State Route (SR) 36 (Figure 2-2), although the remainder of the parcel would remain undeveloped. Existing and future truck and vehicular traffic is anticipated to generate substantial demand for the proposed travel stop facilities and services as the City lies at the junction of SR 36 and SR 139. SR 36 is an east-west highway that begins at US 101 near the California Coast. Near Susanville, the roadway serves as an important link between Redding and Red Bluff (via SR 36 and SR 44) to the west and Reno/North Lake Tahoe (via US 395) to the south; and SR 139 heads north to the Oregon border as a direct route to Klamath Falls.

The City of Susanville is located on the Susan River in the southern part of Lassen County, California at the head of Honey Lake Valley. The City is located approximately 4.5 miles northwest of the unincorporated community of Johnstonville and 82 miles northwest of Reno.

The proposed project includes a travel stop, which would provide professional truck drivers and motorists with 24-hour access to purchase gasoline, diesel, propane, electronics, snacks, travel items, and food from two fast-food restaurants, one with drive-thru. A dog park, recreational vehicle (RV) dump station, bioretention basins, truck, RV and automobile parking areas and landscaping/lighting are also proposed, along with a 10-space overnight RV park. Project visitors/customers would include "over-the-road" trucks (i.e., professional long-haul drivers who are on the road for consecutive days or weeks at a time), traveling motorists, and local residents. Primary access to the project site would be provided from SR 36 via an existing signalized intersection at SR 36 and Skyline Road but with a new dedicated exit lane southbound and a new northbound dedicated turn lane onto Skyline Road. Ingress/egress would be provided via two entry/exit points off Skyline Road, the first for RVs and automobiles and the second for trucks.

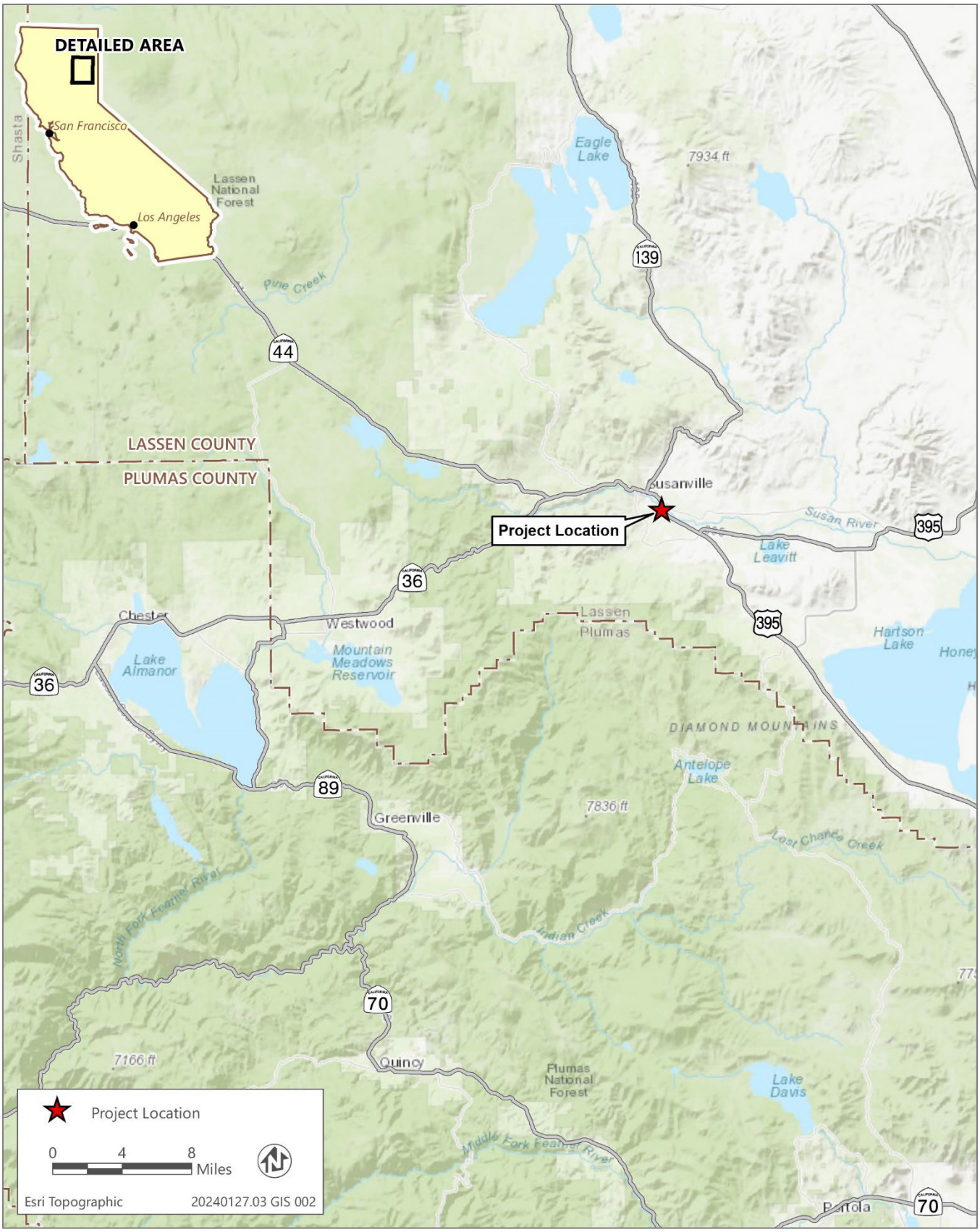
The proposed project would install storm drains and proposed project grading would also implement stormwater control/drainage and water quality features to prevent drainage and water quality impacts, which would include bioretention ponds and standard Best Management Practices (BMPs).

2.2 PROJECT OBJECTIVES

Consistent with CEQA Guidelines Section 15124(b), a clear statement of the objectives and underlying purpose of the project shall be disclosed in the Draft EIR. The underlying purpose of the project is to develop a regional travel stop and related commercial land uses on Regional Commercial (C-R)-designated land within unincorporated Lassen County on land that will be annexed into the City of Susanville via an annexation application processed by the Lassen County Local Agency Formation Commission (LAFCO). This underlying purpose, in turn, gives rise to the following project objectives:

- Create a high-quality travel stop commercial development along SR 36, a designated Surface Transportation Assistance Act (STAA) route.[1]
- Develop a property of sufficient size to create a regional travel stop that would accommodate a truck and auto fuel dispensing area, convenience store, fast-food restaurant, dog park, truck parking and overnight RV parking.
- Construct a travel stop facility near a major highway to minimize truck and automobile movements, Vehicle Miles Traveled (VMT), and associated air pollutant and greenhouse gas emissions and traffic noise on local streets.
- Assist the City of Susanville with meeting its economic development goals, as set forth in its General Plan.
- Maximize tax revenue to the City of Susanville.
- Provide employment opportunities for residents of the City of Susanville and surrounding areas.
- Construct a facility with proximal access to adequate existing or anticipated utility infrastructure to support planned operations.
- Provide a travel stop facility of sufficient size to capture overflow overnight truck parking.

[1] STAA routes are those that trucks that are longer than 'CA legal' are allowed to travel on.



Source: Adapted by Ascent in 2024.

Figure 2-1 Regional Location



Source: Adapted by Ascent in 2024.

Figure 2-2 Project Vicinity

2.3 PROJECT CHARACTERISTICS

The proposed project includes a travel stop, which would provide professional truck drivers and motorists with 24-hour access to purchase gasoline, diesel, propane, electronics, snacks, travel items, and two fast-food restaurants, one with drive-thru. A dog park, recreational vehicle (RV) dump station, bioretention basins, truck, RV and automobile parking areas and landscaping/lighting are also proposed, along with a 10-space overnight RV park. Finish grading for the entire project site would be balanced onsite. The complete project site is shown in Figure 2-2. The site plan is shown on Figure 2-3 and project elevations and floor plans are shown on Figure 2-4 and Figure 2-5 respectively.

Project characteristics and design features are listed below and summarized in the following sections:

- a 12-position passenger vehicle fueling station;
- a 4-position truck fueling station;
- a combined 13,005-square foot (SF) convenience store and two fast-food options, approximately 25 ft in height; 7,943 SF would be convenience store, the smaller of the two fast food options would be 1,588 SF with 3,474 SF for the fast-food restaurant with drive-thru;
- a 5,000 SF dog park;
- a truck scale;
- an RV dump station;
- a 1,000-gallon propane tank;
- a 30,000-gallon below ground gasoline storage tank, including fuel delivery parking;
- four 12,000-gallon above-ground diesel storage tanks for truck fueling, including fuel delivery parking;
- a 20,000 two-compartment split tank with 12,000 gallons of diesel for automobiles and 8,000 of premium unleaded for automobiles;
- a 20,000-gallon diesel exhaust fluid storage tank
- 70 standard truck parking spaces, 53 automobile parking spaces, five RV parking spaces, three electric vehicle (EV) charging station spaces, three accessible parking spaces and 10 overnight RV parking spaces with full hookups (power, water, and sewer);
- on site lighting, consisting of high-mast LED fixtures and LED canopy lighting - 43' in truck areas and 33' in auto areas;
- high-rise sign (75 ft in height), and other directional signage;
- bicycle rack and bicycle parking (8 short term spaces and 2 long term spaces);
- trash compactor, recycling and grease collection bins;
- landscaping, hardscaping, pavement, and fencing;
- one 200,000-gallon fire water supply storage tank and associated booster pump;
- four stormwater bioretention basins between - 6,272 SF and 86,247 SF; and
- rooftop solar panels

Table 2-1 Summary of Proposed Land Uses

Building/Use	Square Feet
Convenience Store	7,943
Fast-Food Counter	1,588
Fast-Food Restaurant (w/drive-through)	3,474
Dog Park	5,000
Landscaping	122,255
Parking	**Number of Spaces**
EV Parking/Charging	3
Total Auto Parking (including 4 Accessible spaces)	53
RV Parking	5
Overnight RV Parking	10
Standard Truck Parking	70
Total	**141**

Source: Lane Engineers, Inc. 2024; adapted by Ascent 2024.

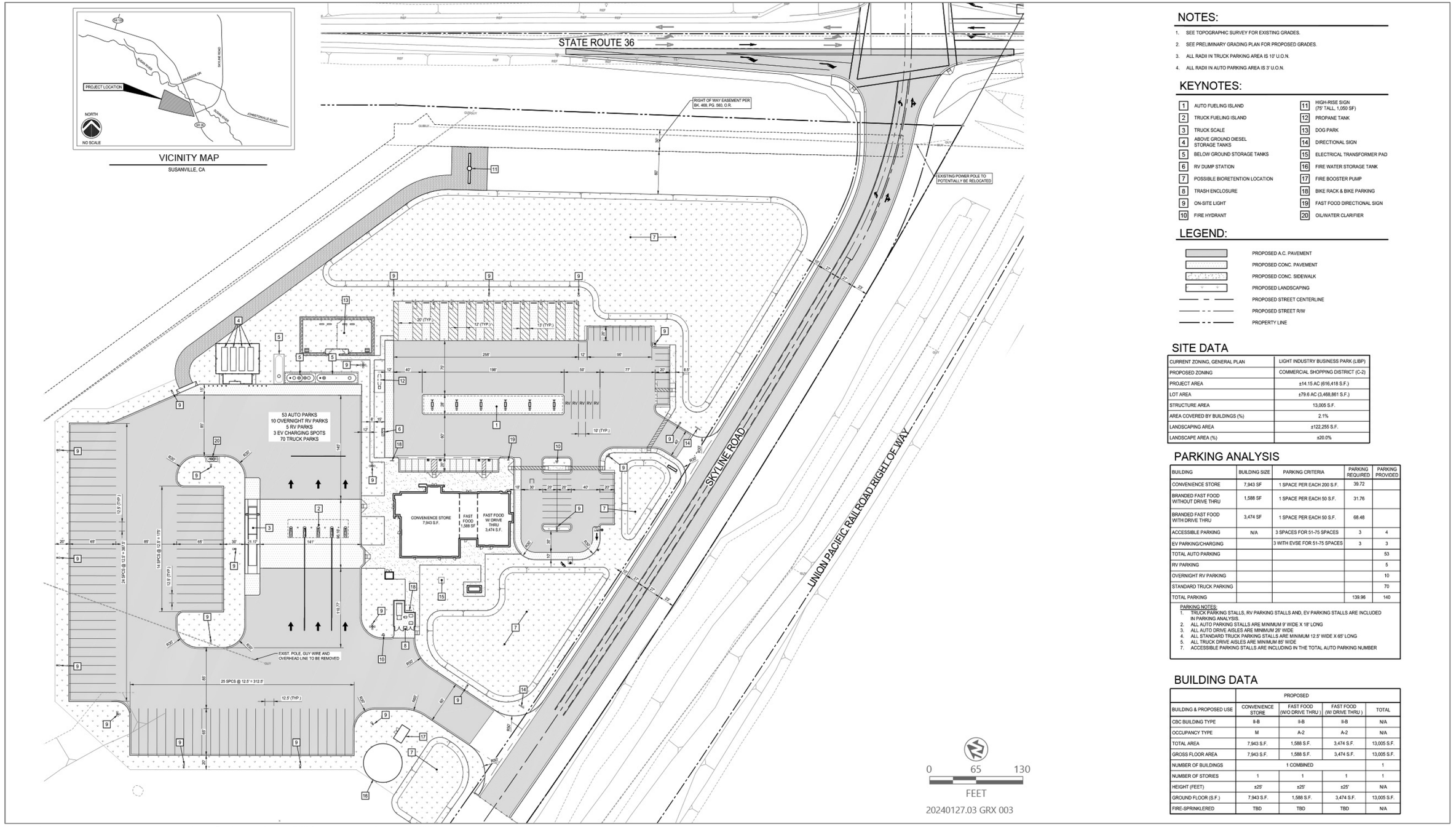
The project would include a 7,943-SF convenience store, one 1,588-SF fast-food option and another 3,474-SF fast-food restaurant with an external drive-through window. The convenience store and fast-food restaurants would occupy the same building, which would be located between the automobile and truck fueling stations and would be in the central portion of the project site. The area north and east of the building would include automobile parking, with overnight RV parking to the very north; and the western and southwestern portions of the project site would consist of parking spaces for trucks. The auto fueling bays and diesel fueling bays would be accessible by separate entry points and physically separated by the building housing the fast-food restaurant and convenience store. Underground gasoline storage tanks would be in the northwest corner of the project site and would consist of a 30,000-gallon tank for unleaded fuel, a 20,000-gallon split tank with 12,000 gallons of diesel for automobiles and 8,000 of premium unleaded for automobiles, and a 20,000-gallon diesel exhaust fluid tank for diesel exhaust fluid. Above-ground diesel storage tanks would be located in the same portion of the site and consist of four 12,000-gallon tanks to hold diesel.

Truck and automobile fueling bays would be covered by a canopy and would have a hydrologically isolated drainage system that discharges to an oil/water separator. The four above-ground storage tanks would include a concrete containment curb that would catch and retain fuel in the event of a fuel spill.

The proposed four stormwater bioretention basins would collect surface runoff from the project site (see Figure 2-3). Bioretention systems are designed to function in a manner similar to the physical, chemical, and biological processes in the natural environment. These systems capture runoff, promote infiltration and evapotranspiration, recharge groundwater, and remove nutrients, sediment, and heavy metals carried in stormwater.

Landscaping would cover approximately 122,255 SF (20 percent) of the 14.15-acre project site. Landscaping would include native plants, xeriscaping, or other drought resistant plants, consistent with the Landscaping Regulations included in Chapter 17.96.040 of the City of Susanville Code of Ordinances. The landscape plan is shown in Figure 2-5.

The project would provide a total of 141 parking spaces, split into 70 standard truck parking spaces, 53 automobile parking spaces, five RV parking spaces, three electric vehicle (EV) charging station spaces, and 10 overnight RV parking spaces; four of the automobile spaces would be accessible per the requirements of the Americans with Disabilities Act (ADA). Overnight truck parking would be available; however, idling of trucks would be limited to no more than five minutes, consistent with California Air Resources Board (CARB) requirements.



NOTES:

1. SEE TOPOGRAPHIC SURVEY FOR EXISTING GRADES.
2. SEE PRELIMINARY GRADING PLAN FOR PROPOSED GRADES.
3. ALL RADII IN TRUCK PARKING AREA IS 10' U.O.N.
4. ALL RADII IN AUTO PARKING AREA IS 3' U.O.N.

KEYNOTES:

1	AUTO FUELING ISLAND	11	HIGH-RISE SIGN (75' TALL, 1,050 SF)
2	TRUCK FUELING ISLAND	12	PROPANE TANK
3	TRUCK SCALE	13	DOG PARK
4	ABOVE GROUND DIESEL STORAGE TANKS	14	DIRECTIONAL SIGN
5	BELOW GROUND STORAGE TANKS	15	ELECTRICAL TRANSFORMER PAD
6	RV DUMP STATION	16	FIRE WATER STORAGE TANK
7	POSSIBLE BIORETENTION LOCATION	17	FIRE BOOSTER PUMP
8	TRASH ENCLOSURE	18	BIKE RACK & BIKE PARKING
9	ON-SITE LIGHT	19	FAST FOOD DIRECTIONAL SIGN
10	FIRE HYDRANT	20	OIL/WATER CLARIFIER

LEGEND:

- PROPOSED A.C. PAVEMENT
- PROPOSED CONC. PAVEMENT
- PROPOSED CONC. SIDEWALK
- PROPOSED LANDSCAPING
- PROPOSED STREET CENTERLINE
- PROPOSED STREET R/W
- PROPERTY LINE

SITE DATA

CURRENT ZONING, GENERAL PLAN	LIGHT INDUSTRY BUSINESS PARK (LIBP)
PROPOSED ZONING	COMMERCIAL SHOPPING DISTRICT (C-2)
PROJECT AREA	±14.15 AC (616,418 S.F.)
LOT AREA	±79.6 AC (3,468,861 S.F.)
STRUCTURE AREA	13,005 S.F.
AREA COVERED BY BUILDINGS (%)	2.1%
LANDSCAPING AREA	±122,255 S.F.
LANDSCAPE AREA (%)	±20.0%

PARKING ANALYSIS

BUILDING	BUILDING SIZE	PARKING CRITERIA	PARKING REQUIRED	PARKING PROVIDED
CONVENIENCE STORE	7,943 SF	1 SPACE PER EACH 200 S.F.	39.72	
BRANDED FAST FOOD WITHOUT DRIVE THRU	1,588 SF	1 SPACE PER EACH 50 S.F.	31.76	
BRANDED FAST FOOD WITH DRIVE THRU	3,474 SF	1 SPACE PER EACH 50 S.F.	68.48	
ACCESSIBLE PARKING	N/A	3 SPACES FOR 51-75 SPACES	3	4
EV PARKING/CHARGING		3 WITH EVSE FOR 51-75 SPACES	3	3
TOTAL AUTO PARKING				53
RV PARKING				5
OVERNIGHT RV PARKING				10
STANDARD TRUCK PARKING				70
TOTAL PARKING			139.96	140

PARKING NOTES:
1. TRUCK PARKING STALLS, RV PARKING STALLS AND, EV PARKING STALLS ARE INCLUDED IN PARKING ANALYSIS.
2. ALL AUTO PARKING STALLS ARE MINIMUM 9' WIDE X 18' LONG
3. ALL AUTO DRIVE AISLES ARE MINIMUM 26' WIDE
4. ALL STANDARD TRUCK PARKING STALLS ARE MINIMUM 12.5' WIDE X 65' LONG
5. ALL TRUCK DRIVE AISLES ARE MINIMUM 85' WIDE
7. ACCESSIBLE PARKING STALLS ARE INCLUDING IN THE TOTAL AUTO PARKING NUMBER

BUILDING DATA

	PROPOSED			
BUILDING & PROPOSED USE	CONVENIENCE STORE	FAST FOOD (W/O DRIVE THRU)	FAST FOOD (W/ DRIVE THRU)	TOTAL
CBC BUILDING TYPE	II-B	II-B	II-B	N/A
OCCUPANCY TYPE	M	A-2	A-2	N/A
TOTAL AREA	7,943 S.F.	1,588 S.F.	3,474 S.F.	13,005 S.F.
GROSS FLOOR AREA	7,943 S.F.	1,588 S.F.	3,474 S.F.	13,005 S.F.
NUMBER OF BUILDINGS	1 COMBINED			1
NUMBER OF STORIES	1	1	1	1
HEIGHT (FEET)	±25'	±25'	±25'	N/A
GROUND FLOOR (S.F.)	7,943 S.F.	1,588 S.F.	3,474 S.F.	13,005 S.F.
FIRE-SPRINKLERED	TBD	TBD	TBD	N/A

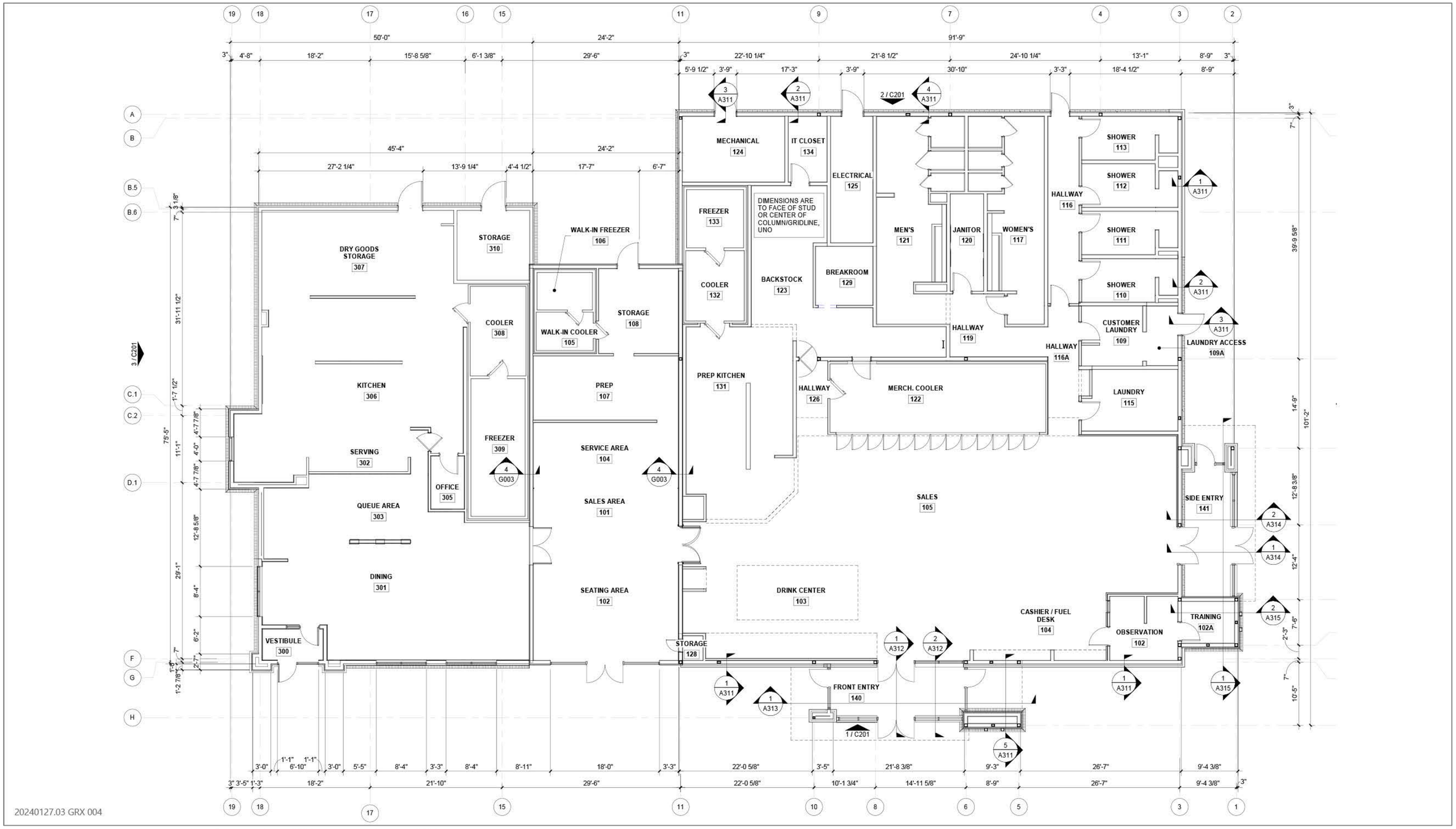
Source: Image produced and provided by Lane Engineers, Inc. in 2024; adapted by Ascent in 2024.

Figure 2-3 Site Plan



Source: Image produced and provided by Lane Engineers, Inc. in 2024; adapted by Ascent in 2024.

Figure 2-4 Building Elevations



Source: Image produced and provided by Lane Engineers, Inc. in 2024; adapted by Ascent in 2024.

Figure 2-5 Floor Plan

2.3.1 Offsite Improvements

The project would include a variety of offsite improvements, including highway and street improvements and transitions, drainage facility connections, utility connections, and landscaping.

HIGHWAY IMPROVEMENTS

The existing SR 36/Skyline Road signalized intersection would be altered through extending Skyline Road to the west, to the westerly site access (solely for trucks). The end point of the road would be closed to traffic but left so that the future Skyline Road extension would not be precluded. The new western 'arm' of Skyline Road would have a dedicated left turn lane onto SR 36 (northbound) and a combined through traffic and right turn lane onto Skyline Road and SR 36 (southbound), respectively. From the north on SR 36 (southbound), the intersection would be altered to include a right exit lane towards the new Skyline Road 'arm' and restriped to include a dedicated left turn lane onto Skyline Road east and a dedicated through traffic lane. From the south on SR 36 (northbound), the intersection would be restriped to include a dedicated left turn lane on the new Skyline Road 'arm' to go with the existing through traffic and right turn lanes.

Skyline Road to the east of the existing junction would also be restriped to include a dedicated left turn lane on SR 36 (southbound), a right turn lane onto SR 36 (northbound) and a through traffic lane onto the new Skyline Road 'arm'.

UTILITIES

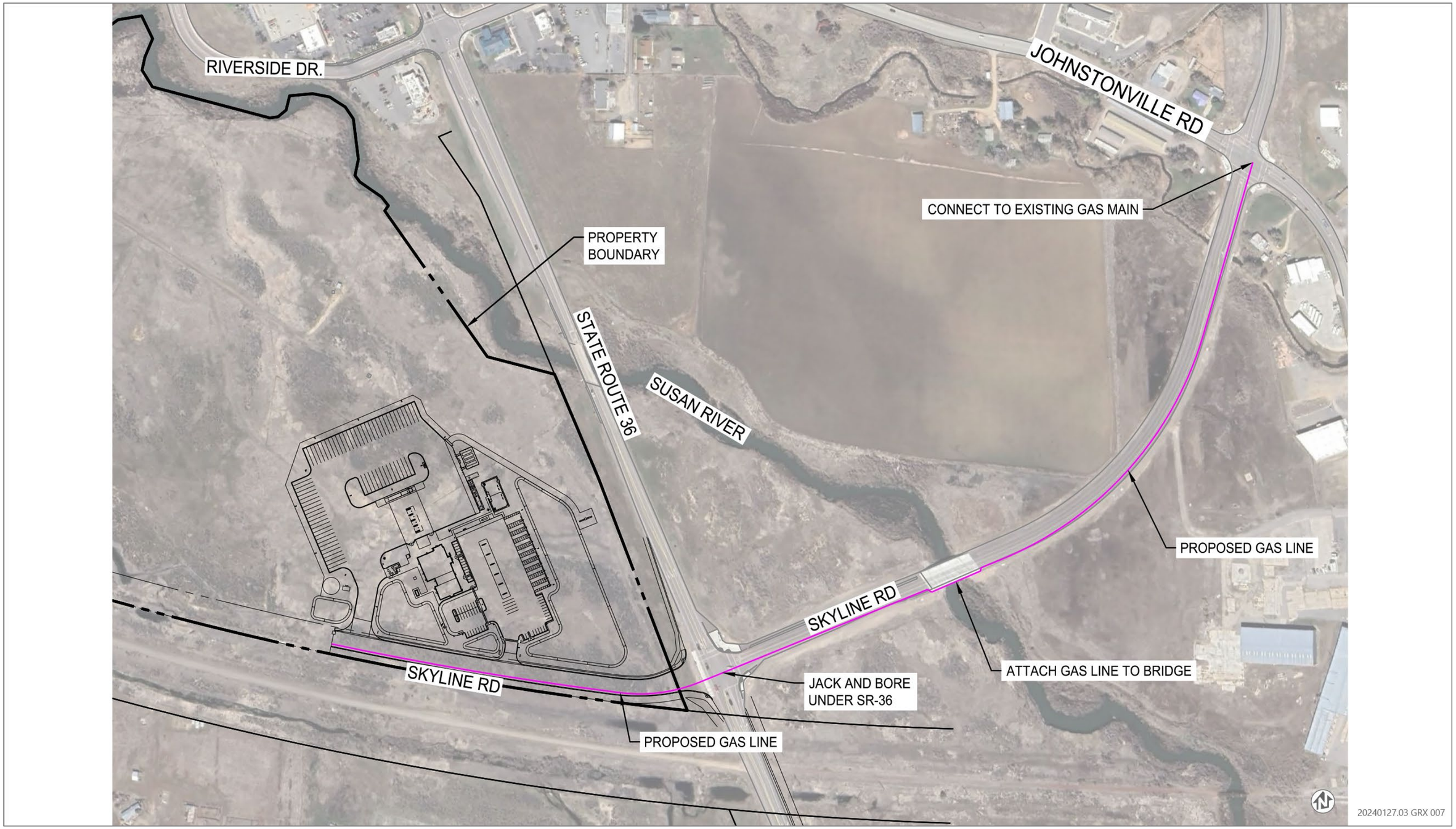
The City of Susanville currently provides water and natural gas services to the city, the Susanville Sanitation District serves the city sewer, and electricity is provided by Lassen Municipal Utility District (LMUD). Utilities would generally be brought to the site via a trench within the outer limits of the County/Caltrans right-of-way. Utilities such as water and gas would be brought to the site from Johnstonville Road via Skyline Road, with the gas line to the west side of the road (Figure 2-6) and water on the east side of the road (Figure 2-7). The gas and water lines would be trenched either side of the Susan River but would be pumped through a pipe that would be hung from the side of the bridge on Skyline Road over the Susan River.

Currently, discussions regarding the sewer line are ongoing, with a number of options in consideration (see Figures 2-8a through 2-8d). The preferred sewer line route (Figure 2-8c) would connect approximately at the SR 36/Riverside Drive intersection and be trenched either side of the Susan River but, with Caltrans permission and an encroachment permit in accordance with Caltrans standards, would be pumped through a pipe that would be hung from the side of the SR 36 bridge over the Susan River (Bridge 7-33), before tying in to the site via the proposed extension of Skyline Road.

During operation, the travel stop would have an estimated water demand of approximately 7,000 to 9,000 gallons per day (gpd) or 7.8 to 10.1 acre-feet per year (AFY). Stormwater would be drained toward the four onsite bioretention facilities shown in Figure 2-3 with any overflow draining to the drainage swale alongside the abandoned railroad right-of-way, before connecting with the existing 24-inch culvert under SR 36 (Figure 2-9).

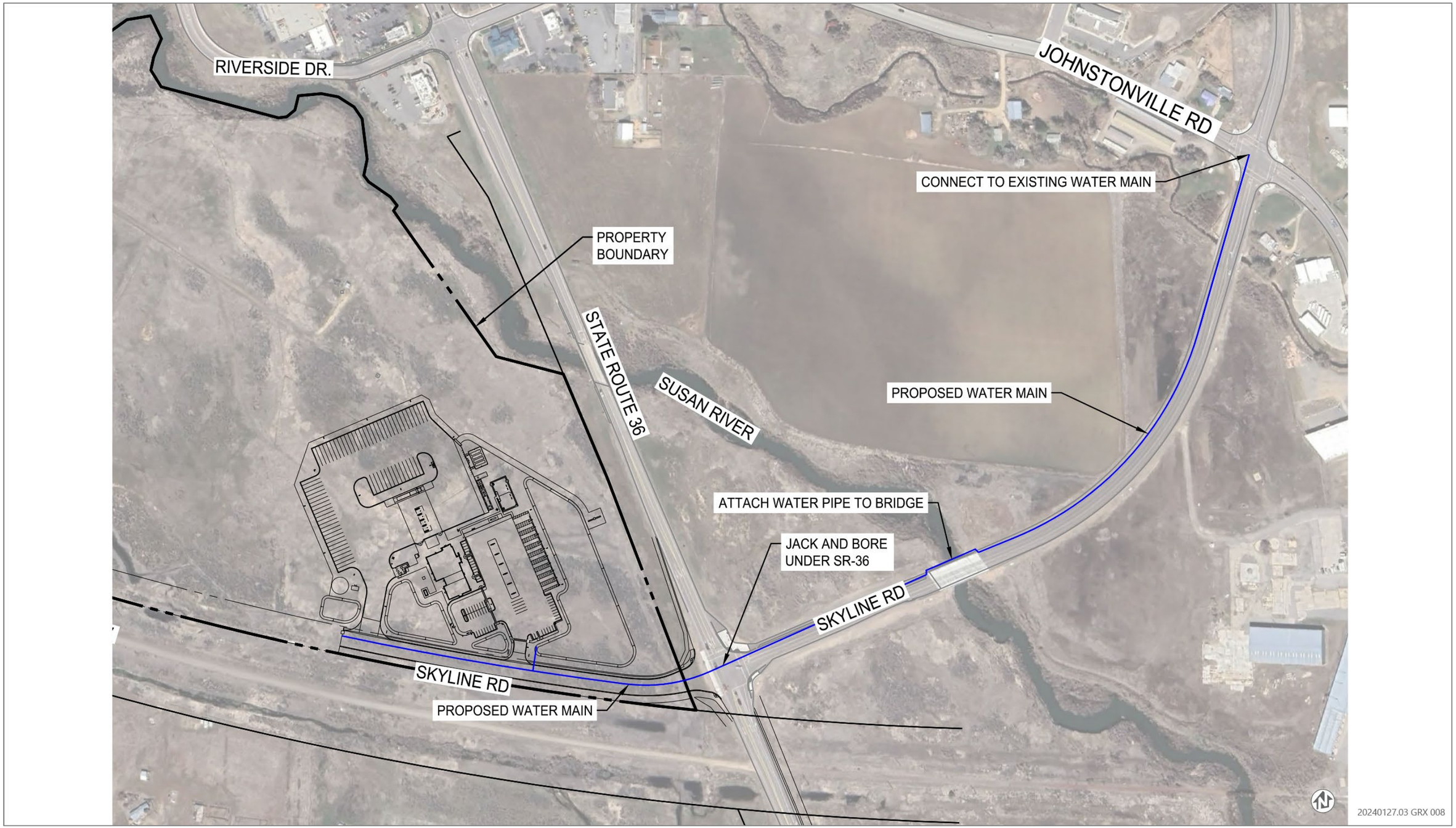
Lassen Municipal Utility District provides electric services. Existing overhead electrical lines are located along Skyline Road and adjacent to SR 36 and would be relocated prior to construction and the project site would tie-in to these.

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Source: Image produced and provided by Lane Engineers, Inc. in 2024; Adapted by Ascent in 2024.

Figure 2-6 Proposed Gas Line



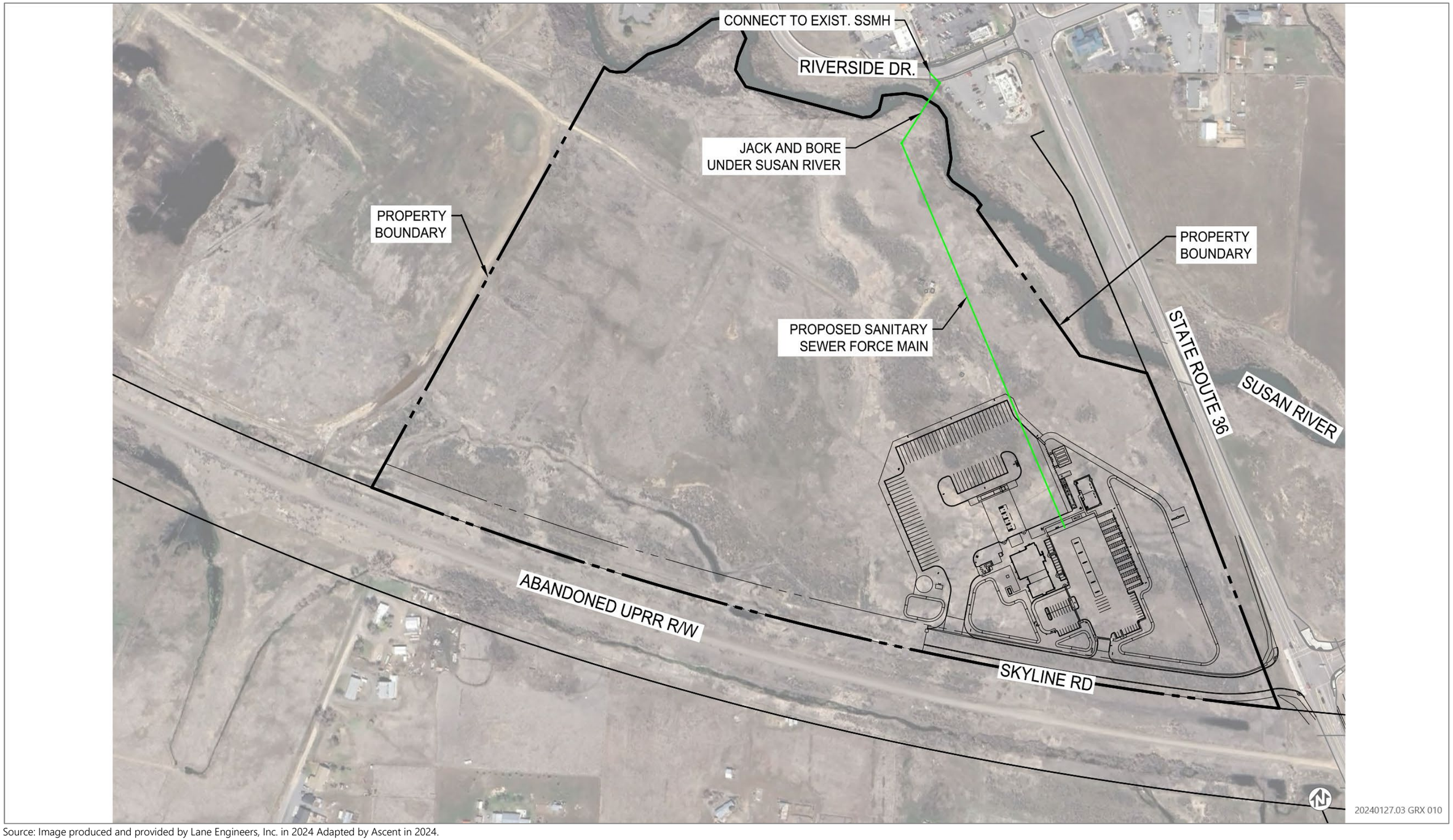
Source: Image produced and provided by Lane Engineers, Inc. in 2024; Adapted by Ascent in 2024.

Figure 2-7 Proposed Water Line



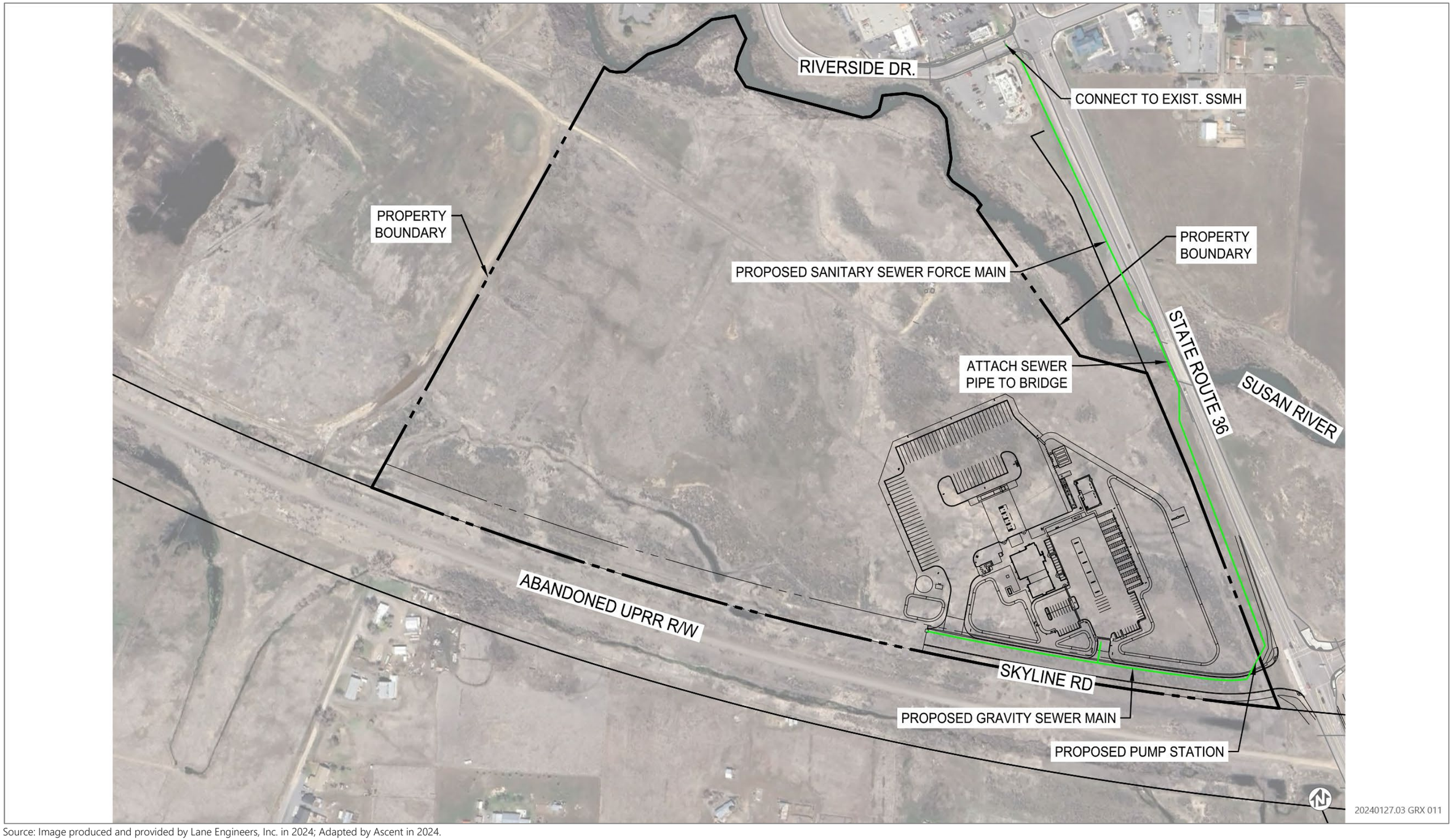
Source: Image produced and provided by Lane Engineers, Inc. in 2024; Adapted by Ascent in 2024.

Figure 2-8a Proposed Sewer Line (Option 1)



Source: Image produced and provided by Lane Engineers, Inc. in 2024 Adapted by Ascent in 2024.

Figure 2-8b Proposed Sewer Line (Option 2)



Source: Image produced and provided by Lane Engineers, Inc. in 2024; Adapted by Ascent in 2024.

Figure 2-8c Proposed Sewer Line (Option 3)



Source: Image produced and provided by Lane Engineers, Inc. in 2024; Adapted by Ascent in 2024.

Figure 2-8d Proposed Sewer Line (Option 4)



Source: Image produced and provided by Lane Engineers, Inc. in 2024; Adapted by Ascent in 2024.

Figure 2-9 Proposed Storm Drains

2.3.2 Annexation into City of Susanville

Currently the project site is outside the city limits and the project applicant is requesting the site be annexed into the City of Susanville City Limits from the current Lassen County jurisdiction via processing of an annexation request with the Lassen County Local Agency Formation Commission (LAFCO). The City of Susanville is the lead agency for processing the proposed annexation with LAFCO. LAFCO policies require that the annexation cannot be approved unless it is consistent with the City's General Plan and Sphere of Influence.

The project proposes a General Plan Amendment of the current County land use designation from the existing Industrial Park General Plan designation to a City *"General Commercial/Shopping Center"* designation and to change the current County zoning of Limited Industrial District (M-L) to a City C-2 (General Commercial/Shopping Center District) designation. A truck and travel stop is allowed in a C-2 Zoning District with the issuance of a Use Permit through the City of Susanville Planning Commission. The proposed General Plan and zoning amendments would ensure the project is consistent with the City's land use designation and zoning district.

2.3.3 Project Construction

Construction equipment anticipated to be used throughout the various phases of construction includes:

- air compressors,
- backhoes,
- compacters,
- concrete/industrial saws,
- excavators,
- forklifts,
- graders,
- pavers,
- paving equipment,
- rollers,
- scrapers, and
- water trucks.

Construction is anticipated to begin in Q3 2026 and last approximately 12 months. Construction activities would occur Monday through Friday, during daytime hours (typically 8 a.m.– 5 p.m.). Table 2-2 provides an overview of the phases of construction that would occur. A short demolition phase would be required to remove existing underground utility lines.

Table 2-2 Anticipated Construction Phasing

Sub-Phase Number	Sub-Phase Name	Approximate length of Sub-Phase
1	Demolition	1 month
2	Site Prep	1 month
3	Finish Grading	1 month
4	Underground	2 months
5	Building Construction	5 months
7	Paving	1 month
8	Architectural Coating	1 month

Source: Lane Engineers, Inc. 2024; adapted by Ascent 2024.

2.3.4 Project Operations

The anticipated opening year for the project is 2027. The proposed travel stop would be open 24 hours per day, seven days per week, and is designed to accommodate parking of up to 70 trucks, 56 automobiles (including EV charging and accessible spaces) and 15 RVs onsite at any given time. In terms of employment, the total minimum number of employees daily would be approximately 27 employees located on the travel stop site at one time, broken

down by 12 total employees daily (3 shifts/day) for Convenience Store and Auto and Truck Fueling and 15 total employees daily (3 shifts/day) for the Fast Food Restaurants (with drive-thru).

The travel stop would receive approximately 3-4 gasoline deliveries and 12-14 diesel deliveries per week. It is anticipated there will be approximately 1-3 small deliveries per day for the convenience store, and approximately 2 deliveries per week for the restaurants. As described previously, diesel fuel, gasoline, and diesel exhaust fluid would be stored onsite in above-ground storage tanks. Total annual fuel throughput for the travel stop is planned to be 2,500,000 gallons of diesel fuel and 2,800,000 gallons of gasoline.

Access to the travel stop facility would be via two ingress/egress drives along the newly paved Skyline Road. The northern driveway (40 feet wide) along Skyline Road would be dedicated for the use of automobiles and RVs while the southern driveway (60 feet wide) would be dedicated for trucks only. The northern ingress/egress drive from Skyline Road would provide access to auto fueling islands, the convenience store, the fast-food restaurants, the dog park, parking areas, the RV dump station, propane tank, and the RV overnight parking spaces; the southern ingress/egress drive would provide access to truck fueling stations, scales, and parking areas. Onsite truck travel lanes are proposed to be 85 feet wide and vehicular travel lanes are proposed to be 30 feet wide. Site access points are depicted in Figure 2-3.

2.3.5 Project Design Features

The above sections identify general characteristics of the project upon which the analyses of this Initial Study are based. In addition to these project characteristics, the City proposes to implement Project Design Features (PDFs) that specifically relate to environmental considerations. The PDFs would be included in the Mitigation Monitoring and Reporting Program (MMRP) required in association with certification of the Final EIR.

- PDF-TR-1: Construction Management and Traffic Plan. A Construction Management and Traffic Plan (CMTP) will be developed by the contractor and approved by the City of Susanville to alleviate potential construction period impacts. The Plan would include but not necessarily be limited to:
  - name and telephone number of a contact person regarding traffic complaints or emergency situations;
  - community notification procedures and contact information for local police, fire, and emergency response organizations and procedures for the continuous coordination of construction activity;
  - procedures for training the flag person(s) used in implementing the plan;
  - the location, times, and estimated duration of any temporary lane closures,
  - details of any permits that will be required;
  - developing, and once approved, managing the haul route plan and construction parking management plan;
  - timing of disruptive construction activities; scheduling of deliveries, pick-ups and hauling of material during non-peak travel periods to the extent possible;
  - the contractor will provide an estimate of truck volume and schedule. Areas will be designated by the city for the staging of all trucks. All earth-moving and ready-mix trucks will be equipped with two-way radios so that the drivers at the staging areas are linked to a person controlling traffic at the project site. Trucks will follow a city-approved route to the project site.

9. Surrounding Land Uses and Setting:

To the north, the project site is located adjacent to the Susan River with Riverside Drive, commercial businesses and the Lassen County Government center across the River. To the east, the project site is bounded by SR 36 with primarily vacant land beyond. To the south, the former Southern Pacific Railroad right-of-way (ROW) is immediately adjacent to the project site, although the tracks were removed in approximately 2006 and the ROW is now an unpaved portion of Skyline Road, with several residential properties off Sierra Road present further south. Beyond Sierra Road lies agricultural land. To the west, the remainder of the project parcel is present with vacant land

adjacent, and a lumber yard associated with a prefabricated construction company beyond. Susanville Municipal Airport is located approximately 3 miles southeast of the project site.

The project site is included within Assessor's Parcel Map Book 107-28, and no street address is currently assigned to the property. The project site consists of relatively disturbed, generally flat land with riverine and wetland habitat to the north associated with the Susan River. The project site is disturbed and heavily populated with invasive plant species such as perennial pepperweed (*Lepidium latifolium*) and cheatgrass (*Bromus tectorum*) as well as Medusa head (*Elymus caput-medusae*) to a lesser extent. Several barbed wire fence lines are present on the property, indicating the site was likely previously used as pastureland. Additionally, a former barn with associated outbuildings and a retention pond was present immediately west of the site, although this had been demolished by August 2019.

The project site area is generally at elevation 4,151 to 4,153 feet above mean sea level (msl). The SR 36 highway embankment and future road grade is at 4,154 ft at the intersection with Skyline Road, and the former railroad embankment is at 4,159 ft. The SR 36 embankment cuts off natural flow along the plain and water must divert northward to the Susan River channel.

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

A summary of the discretionary actions and permits that are anticipated to be required for the project are set out below. Based on the outcome of biological surveys, additional permits and approvals may be required. These permits and approvals may include incidental take permits from the California Department of Fish and Wildlife (CDFW), ministerial permits from the City of Susanville, and other related authorizations:

- City of Susanville - EIR Certification
- City of Susanville - Conditional Use Permit (for 75' sign);
- City of Susanville - Architectural & Site Plan Review
- City of Susanville - General Plan Amendment and Rezoning/Zone Change (with Annexation)
- City of Susanville/Lassen Local Agency Formation Commission - Annexation processing
- Lahontan Regional Water Quality Control Board - National Pollutant Discharge Elimination System construction stormwater permit

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**
Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) identified 10 contacts split between seven California Native American tribes. The City of Susanville sent notification letters to the Native American tribes that were on the project's Assembly Bill (AB) 52 list at the end of January 2025. The 30-day window for Native American tribes to request consultation is ongoing.

2.4 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

Among the permissible purposes of an Initial Study are to "[a]ssist in the preparation of an EIR, if one is required, by: … [f]ocusing the EIR on the effects determined to be significant," (CEQA Guidelines Section 15063(c)(3)(A).) Where used for such a purpose, a lead agency may decide that certain potential impacts may require comparatively lengthy discussions in the main body of a Draft EIR while others may be adequately discussed in the Initial Study and need not be addressed further in the main body of the Draft EIR. Thus, CEQA Guidelines Section 15128 provides that "[a]n EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Such a statement may be contained in an attached copy of an Initial Study."

Where a Draft EIR includes a main body of text focused on particular impact categories and also includes, as an appendix, an Initial Study addressing other impact categories, the Initial Study is treated as part of the EIR for purposes of judicial review for legal adequacy. (See, e.g., *Ocean Street Extension Neighborhood Assn. v. City of Santa Cruz* (2021) 73 Cal.App.5th 985, 1005-1006 ["[t]he information from the initial study enabled the lead agency to modify the project to mitigate adverse impacts before the EIR was prepared, helped focus the EIR on the effects determined to be significant, and explained the reasons potentially significant effects would not be significant"; "nothing prohibits the discussion of impacts that are less than significant with mitigation in an initial study rather than in the EIR so long as the EIR complies with its purpose as an informational document"].)_

This Initial Study has been prepared in order to determine which environmental effects of the project should be addressed in detail in the main body of the upcoming Draft EIR and which effects can be addressed for purposes of section 15128 through the Initial Study. The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. Where noted below with a "Y" for yes, the topic with a potentially significant impact will be addressed in the main body of the upcoming Draft Environmental Impact Report.

N	Aesthetics	N	Hazards / Hazardous Materials	Y	Transportation
N	Agriculture and Forest Resources	N	Hydrology / Water Quality	Y	Tribal Cultural Resources
Y	Air Quality	N	Land Use / Planning	Y	Utilities / Service Systems
Y	Biological Resources	N	Mineral Resources	N	Wildfire
Y	Cultural Resources	Y	Noise	Y	Mandatory Findings of Significance
Y	Energy	N	Population / Housing	N	None
Y	Geology / Soils	N	Public Services	N	None with Mitigation Incorporated
Y	Greenhouse Gas Emissions	N	Recreation		

2.5 DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

On the basis of this initial evaluation:

No I find that the proposed project could not have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

No I find that although the proposed project COULD have a significant effect on the environment, there WILL NOT be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

Yes I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** (EIR) is required. The EIR shall consist of two parts, and perhaps others. The first part will be text yet to be composed addressing in detail the impacts for which the city answered "Yes" in Section 2.4 above. The second part will be this Initial Study, which the city has prepared in satisfaction of CEQA Guidelines Section 15128, and will be included as an appendix to the publicly-circulated Draft EIR.

No I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

No I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **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.

Signature _____ Date _____

Printed Name_____ Title_____

Agency _____

2.6 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a) the significance criteria or threshold, if any, used to evaluate each question; and
    b) the mitigation measure identified, if any, to reduce the impact to less than significance.

2.7 AESTHETICS

CEQA INITIAL STUDY CHECKLIST QUESTIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
I. Aesthetics.				
Would the project:				
Except as provided in Public Resources Code section 21099 (where aesthetic impacts shall not be considered significant for qualifying residential, mixed-use residential, and employment centers), 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 points.) 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?	☐	☐	☒	☐

2.7.1 Discussion

a) Have a substantial adverse effect on a scenic vista?

The discussion below addresses whether the segment of SR 36 on which the project site is located includes "scenic vistas" or is considered a "scenic highway"; considers the potential effects on views from both SR 36 and nearby trails; and addresses potential effects due to both project construction and project operation.

A scenic vista is generally defined as a public viewpoint that provides expansive views of a highly valued landscape for the benefit of the public. The City of Susanville is located on the Susan River in the southern part of Lassen County, California at the head of Honey Lake Valley. The city is surrounded by mountains and hills to the north, west, and south, with Susanville Peak to the north and Diamond Mountain to the south. To the east and southwest and towards Honey Lake, the terrain is generally much flatter, and views are less distinctive.

As confirmed by the Biological Resources site walkover undertaken on June 27, 2024 (see Section 2.9, Biological Resources, of this Initial Study for details), the 14.1-acre site is predominantly flat and is very disturbed and covered with invasive plant species. As such, the view of the project site itself is not considered particularly attractive. There are no trees or rock outcroppings on the site, although there are willow/cottonwoods and riparian vegetation at the north of the overall parcel adjacent to the Susan River. A barn building previously occupied part of the site but was demolished at some point between July and August 2019. There is also a small hut type building in the middle of the entire parcel, but outside the project limits of disturbance.

With regard to scenic areas in the project's vicinity, Riverside Park is the closest (approximately 1 mile northwest at Riverside Drive/Limoneria Avenue) and the Bizz Johnson National Recreation Trail - Susanville Trailhead is located 1.6 miles northwest of the project site at the Susanville Depot on North Railroad Avenue/Richmond Road and represents the eastern end of the trail. Due to the Nobles Construction Components Inc. building and lumber yard to the east of the park, the project site is not visible from Riverside Park. The Bizz Johnson National Recreation Trail connects Susanville with Mason Station, a railroad junction 4.5 miles north of Westwood (BLM 2021). The trail is a 25.4 mile "rail trail" as it follows the former Southern Pacific Railroad grade through the Susan River Canyon and also hosts an annual marathon and ultra-marathon race along the route. However, as the trail heads west from Susanville, it is in a canyon and the trail crosses the Susan River 12 times, before cresting at 5,580 feet at Westwood Junction. Furthermore, the project would not preclude any future extension of the trail to the High Dessert Prison, as suggested in the Lassen County Bikeway Master Plan (Lassen County Transportation Commission 2011). As such, as the project site is not visible from the existing trail and plans to extend the trail are not currently known, there would be no impact on the trail or scenic views to/from the trail associated with construction or operation of the project.

According to the Lassen County General Plan Natural Resources Element (Lassen County 2000), scenic resources are identified as effectively those within Scenic Highway Corridors, noting the "scenic highway includes the road itself and its right-of-way and the scenic areas traversed as visible from the highway" (Lassen County 2000, Page 3-60). Scenic vistas in relation to the project are therefore chiefly associated with views to the north and south from SR 36. As also noted within the general plan, there are no State Scenic Highways designated by the State of California in Lassen County and also no official County Scenic Highways, as recognized by the state.

In addition, the Susanville Vicinity Area Plan (Lassen County 1984) does not identify any scenic vistas in the vicinity of the city but does identify three areas which in 1984 were deemed to potentially qualify for scenic highway status. These areas included:

- "State Highway 139 from the northern end of the planning area to the northern border of Section 28 (Township 30 North, Range 12 East). The area presents a spectacular view of the valley, the Diamond Mountains and the planning area.
- State Highway 36 from the western border of the planning area to the Susanville City limits. This portion of the highway provides tourists with a spectacular view of the valley, the Susan River and the planning area.
- State Highway 36 from the eastern border of the planning area to the Southern Pacific Railroad lines. This area includes sites of agricultural land and the rural character of the Honey Lake Valley."

However, none of these potential scenic highways were determined to be eligible or officially designated, as according to the California State Scenic Highway System Map (Caltrans 2018), the closest designated highway is the Volcanic Legacy Scenic Byway (a federal byway), located 6.3 miles east of the project site, starting at the intersection of SR 36 and SR 44 (Volcanic Legacy Community Partnership 2020). In addition, since being proposed as a potential scenic highway, a significant amount of development has occurred in the vicinity, such as the construction of Riverside Drive and build out along Riverside Drive including the Safeway and McDonald's. As such, the rural character of the area has been detrimentally changed and likely would no longer be considered as particularly scenic. Therefore, due to distance and intervening structures, there would be no impact on the Volcanic Legacy Scenic Byway and no impact on any officially designated scenic highway as there are none in the project site's vicinity.

In terms of the general plan corridors identified, during construction, material storage, equipment staging areas and temporary construction worker parking would be located on the project site. No on-street construction worker parking, material storage, or equipment staging would be permitted outside of project limits. Nevertheless, construction equipment such as excavators, dump trucks, cranes, and other construction/hauling equipment has the potential to impact the visual character of the area, as construction of the single-story building and associated project elements would be visible to vehicular users on SR 36, and particularly during installation of offsite utilities alongside SR 36 and Skyline Road. Furthermore, construction would occur over 12 months, occurring in phases, and construction activities would generally be confined to the 14.15-acre project site, with utilities installation the only construction occurring outside of the project site, which as mentioned, would be alongside SR 36 from Skyline Road to Riverside Drive and from Johnstonville Road/Skyline Road intersection to the project site.

Regarding scenic areas visible from the highway, people experience their surrounding landscapes differently. Some viewers are sensitive to changes in their environment and others may vary in sensitivity, but due to the duration (static or slow duration versus dynamic views, such as those speeding by on the freeway), the relative visual experience may be diminished or heightened. Travelers' sensitivities tend to vary with the reason for their travel. As tourists, they may be sensitive to aesthetic changes, but because they are commonly not familiar with the existing conditions, project changes may not be as noticeable. Other travelers, such as commuters and haulers, may view the environment from a practical perspective – by placing most of the aesthetic value and enjoyment of the travel corridor on the functionality and smooth movement. Commuters regularly travel the same route, whether for work or leisure, and because the trips are repeated, they become routine rather than novel; aesthetic changes that reduce visual coherence will be highly noticeable to commuters because of their familiarity with the landscape. Travelers are generally interested in the aesthetics of the route, but potentially are less sensitive than nearby neighboring households and businesses. Additionally, a traveler's views from SR 36, whether as a driver or passenger, would be of short duration because road users would be generally traveling at speeds of up to 50 mph. As autonomous vehicles or new transit options are developed, the traveler's focus may shift more from the roadway to the surrounding environment; however, until these vehicles and transit options become commonplace, views of construction equipment would be relatively fleeting. To put this into context, to travel 0.4-miles from the Riverside Drive/SR 36 intersection to the proposed new project access at Skyline Road/SR 36 intersection at 50 mph would take approximately 30 seconds. Therefore, visual character impacts experienced in any single viewing location and adverse visual effects would be intermittent and temporary due to both the fleeting nature of traffic passing by a fixed location, and temporary in terms of construction only lasting for 12 months.

In terms of project operation, the general plan notes that development is not precluded from occurring within the scenic corridor and, in planned locations, motels, restaurants and certain other commercial services are considered appropriate provided the intensity and location of development does not impair natural scenic qualities and that the design of all development is in character with the natural surroundings. Therefore, the travel stop is consistent with the intent of the general plan. The project would also include a buffer of approximately 130 feet (including a 30 feet utility corridor ROW) from the eastern edge of project development to the Caltrans ROW associated with SR 36. Although the high-rise sign would be installed within this buffer, all other project elements apart from utilities would be installed outside the buffer, which would help to create separation from the highway ROW and the project site. The high-rise sign is the tallest aspect of the project, and would be approximately 50 feet taller than the top of the one-story convenience store/fast-food restaurant building. According to the sign survey undertaken for the project, as traffic travels northbound, the sign would be obliquely visible from 0.7-miles south of Riverside Drive/SR 36 intersection, see Figure 2-10a. Traveling southbound from Susanville, the high-rise sign would be visible at 0.5-miles from the Riverside Drive/SR 36 intersection, see Figure 2-10b. As with construction impacts, visual character impacts experienced from SR 36 would be fleeting as motorists pass by the operational travel stop. Furthermore, in accordance with the Susanville Vicinity Area Plan Policy 8.12, new development within the scenic highway areas identified would use natural materials and earthtone colors that blend into the landscape, which would help ensure the project is visually coherent with the surrounding landscape (Figure 2-4). Therefore, development of the project would not have a substantial adverse effect on a scenic vista and impacts would be less than significant. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The project site is not located along a state-designated scenic highway, according to the general plan and the California State Scenic Highway System Map (Caltrans 2018). As mentioned in Section 2.4.1 a), the 1984 Susanville Vicinity Area Plan does not identify any scenic vistas in the vicinity of the city but does identify three areas which could potentially qualify for scenic highway status. However, none of these potential scenic highways were determined to be eligible or officially designated, as according to the California State Scenic Highway System Map, the closest designated scenic highway is the Volcanic Legacy Scenic Byway, located 6.3 miles east of the project site, starting at the intersection of SR 36 and SR 44 (Volcanic Legacy Community Partnership 2020).

In addition, as noted earlier, the project site is predominantly flat, is very disturbed and covered with invasive plant species. There are no trees or rock outcroppings on the 14.1-acre site, although there are willow/cottonwoods and riparian vegetation at the north of the overall parcel adjacent to the Susan River. There is a small hut type building in the middle of the entire parcel, but outside the project limits of disturbance.

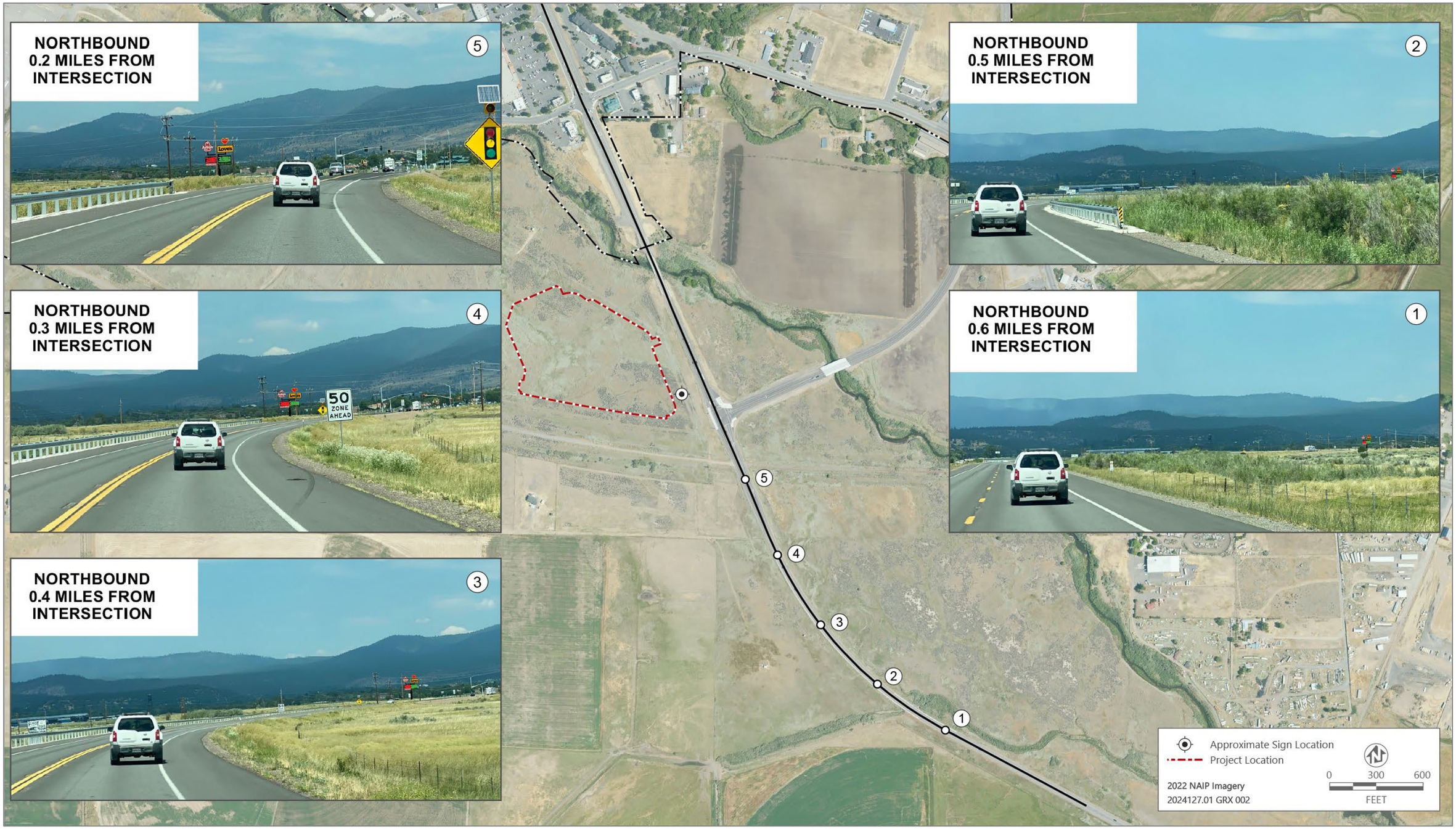
Due to distance and intervening structures, there would be no impact on the Volcanic Legacy Scenic Byway and no impact on any officially designated scenic highway as there are none in the project site's vicinity. There would be no impact to trees, rock outcroppings, and historic buildings within a state scenic highway. Therefore, development of the project would not have a substantial adverse effect on scenic resources and impacts would be less than significant. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: No impact.

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 points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

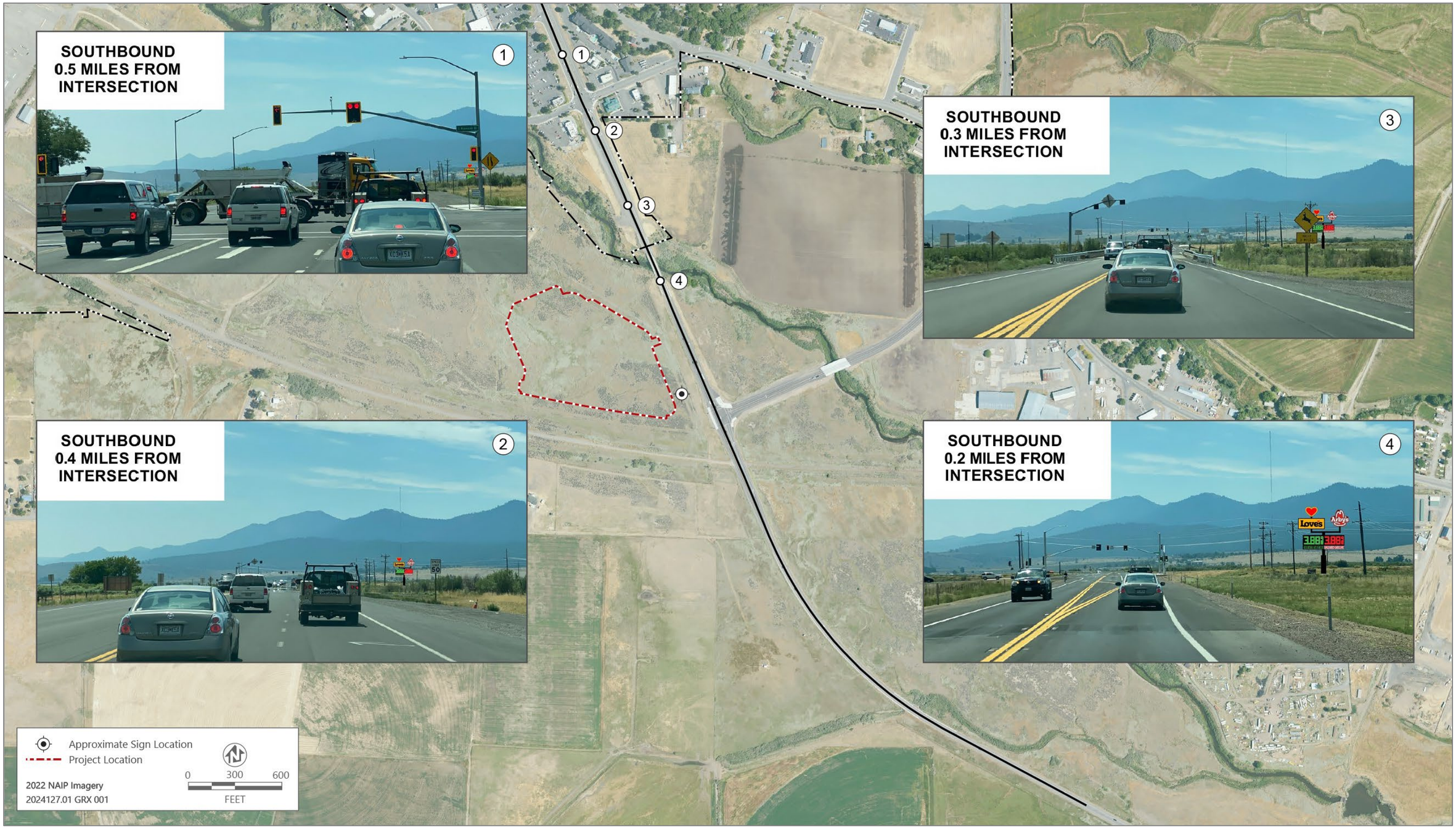
The project is located in a non-urbanized area. The CEQA Guidelines Section 15387 defines "urbanized area" as "a central city or a group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 persons per square mile." Susanville, which in 2022 had a population estimated at 15,737 (U.S. Census 2022), does not fall within this definition. Thus, the pertinent question is whether the proposed project would substantially degrade the existing visual character or quality of public views of the site and its surroundings.

There are limited views of the project site from public locations, apart from chiefly SR 36, as discussed in 2.7.1 a) previously, as the Bizz Johnson Trail extension has not been constructed or proposed for construction as of the time of this Initial Study, and there are no views from public parks of the project site. Construction equipment such as excavators, dump trucks, cranes, and other construction/hauling equipment has the potential to temporarily impact the visual character of the area, as construction of the single-story building and associated project elements would be visible from sidewalks along Riverside Drive and Skyline Road and from neighboring private residential dwellings and business properties. Residential dwellings located on Sierra Road (with views northeast) and San Francisco Street (with views southwest), and neighboring business properties would see construction elements (equipment and building construction) relatively proximate, although views from San Francisco Street would be at a much farther distance and thus less visible. Additionally, properties to the south would have their views of construction equipment lessened to a degree due to the former railroad embankment, which is approximately 5-feet taller than the site's elevation. According to CEQA case law (see *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477), impacts to private views are not considered to be significant impacts, however, construction would be relatively temporary and would occur over 12 months, occur in phases, and construction activities would generally be confined to the 14.1-acre project site, with utilities installation the only construction occurring outside of the project site. Upon completion of the construction period, all construction equipment would be removed from the project site, thus construction impacts would be temporary and would not substantially degrade the existing visual character or quality of public views of the site.



Source: Adapted by Ascent in 2024.

Figure 2-10a Mileage Northbound



Source: Adapted by Ascent in 2024.

Figure 2-10b Mileage Southbound

Once operational, some neighboring households and businesses would have a permanent view of the project site; however, certain views may be filtered by vegetation, and businesses and residences are located at varying distances from the project site, and not all are likely to experience direct views. Depending on the viewer's locale (work versus residential), neighboring households and businesses range from major to moderate sensitivity to changes in visual resources. These views tend to be habitual and static views, and therefore, viewers can watch the evolution of changes as they occur. While workers may appreciate views from their windows at work, there is rarely an expectation of an aesthetic as a requirement of their place of employment and therefore, residents tend to be more sensitive to visual changes than workers. The nearest residential dwellings would be approximately 600 ft from the travel stop; however, in accordance with City of Susanville Code of Ordinances, Section 17.36.050 *Site Development Standards*, the maximum permitted structural height in the C-2 district is 40 feet and the single-story building housing the fast-food restaurant and convenience store would be substantially below this at approximately 25 feet (refer to the building elevations shown in Figure 2-4 in Section 2, "Project Description"). The proposed structures would be of similar height and massing to other rural commercial developments in the region. The structures would not be sizeable enough to substantially disrupt views of the environment and would not be tall enough to block views of surrounding mountains. Additionally, the former railroad embankment, which lies 5-feet above the grade of the site, would also help to obscure the development. The development would also be screened to a degree in accordance with City of Susanville Code of Ordinances, Section 17.96.040 *Landscaping*, which may also filter views of the project. Furthermore, views of the new structures and vehicles using the Travel Stop would be predominately limited to motorists traveling at moderate speeds on SR 36; therefore, the duration of views would be relatively short and viewer sensitivity would be low. Furthermore, the project site is adjacent to SR 36 and in proximity to rural development, including timber yards located 0.3-miles east and 0.7-miles west, which detracts from the aesthetic of surrounding areas. Therefore, the temporary presence of construction equipment and the permanent introduction of new structures would not dominate or detract from any scenic viewsheds. Project construction and operation would be barely noticeable, if noticeable at all, from surrounding mountains. Based on the above discussion, the project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings and impacts would be less than significant. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

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

The project site is located within a rural area but characterized by moderate ambient nighttime lighting levels due to proximity to the City of Susanville and to vehicles traveling on SR 36. Additionally, there is already lighting present at the SR 36/Skyline Road intersection for safety purposes. As discussed previously, construction activities would be short-term and would generally occur during daytime hours. However, security lighting may be used onsite at night and would represent a new source of temporary lighting on the west side of SR 36 at its crossing with Skyline Road. If security lighting is needed, it would be shielded and projected downward to minimize spillover effects on adjacent roadways.

Once operational, the project would include onsite lighting, consisting of high-mast light-emitting diode (LED) fixtures and LED canopy lighting. In addition, signs for the travel stop, convenience store and fast-food restaurant building would be illuminated. Interior lighting would also be noticeable at nighttime through building windows. Offsite utilities would likely be buried underground and would not introduce new sources of lighting along its alignment. Additionally, the project would be built in accordance with City of Susanville Code of Ordinances, Section 17.96.050 *Lighting*, which states:

> All lighting, exterior and interior, shall be designed and located so as to confine direct lighting to the premises. A light source shall not shine upon or illuminate directly on any surface other than the area required to be lighted. No lighting shall be of the type or in a location such that constitutes a hazard to vehicular traffic, either on private property or on abutting streets.

According to the project's photometrics plan (Figure 2-11), lighting levels would be 1 footcandle (10.76 lux) or less at the edges of the project site, before fading to 0.0 footcandles. For comparison, 1 footcandle is approximately equal to

twilight conditions and 0.1 footcandle is approximately equal to deep twilight conditions. As such, lighting levels would not be so bright as to cause substantial light that would adversely affect nighttime views.

Furthermore, applicable Backlight-Uplight-Glare (BUG) standards established by the Illuminating Engineering Society of North America (IESNA) would also be adhered to as well as CALGreen code requirements related to light pollution reduction (see CALGreen 2022, Chapter 5, Section 5.106.8). Compliance with these existing regulations and standards would ensure that impacts regarding project lighting are less than significant as they would ensure that light levels at property lines would not create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area.

Glare occurs from sunlight reflected from reflective materials utilized in existing buildings along the adjacent roads and from vehicle windows and surfaces. Glare-sensitive receptors include the residential uses surrounding the project site. As glare is a temporary phenomenon that changes with the movement of the sun, receptors other than motorists are generally less sensitive to glare impacts than to light impacts.

Construction equipment and vehicles would be temporarily present within the project site. Glare from these surfaces would be minor and would not adversely affect daytime views. Once operational, the project would not include building materials or surfaces that would create substantial sources of glare. Additionally, the offsite utilities would be buried underground apart from crossing the Susan River where they would be hung from the bridges, and would not introduce new sources of glare along its alignment. Vehicles within the project site would reflect small amounts of sunlight, introducing marginal sources of spillover glare. Any glass fenestration incorporated into the project's components would be designed with low-reflectivity values (no mirror-like tints or films), as recommended by the Bird-Safe Buildings Act (Library of Congress 2023); and additionally, adherence to Chapter 5, Section 5.106.8.2 of the CALGreen code would aid minimizing off-site glare. To the extent glare is experienced by adjacent uses or the occupants of vehicles on nearby streets, it would be minimal and temporary, changing with the movement of the sun throughout the course of the day and the seasons of the year. As mentioned, adherence to IESNA BUG standards would also help minimize glare to the maximum extent feasible. Based on the above, light and glare impacts would be less than significant. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

LIGHTING FIXTURE SCHEDULE

QTY	TYPE	MANUFACTURER	CATALOG #	DESCRIPTION	BUG RATING	LUMENS	VOLTS	WATTS	MOUNTING	REMARKS	FURNISHED BY
1	BB	COOPER	GLEON-AF-06-LED-E1-SL3-BZ-7050	6 Cube LED Site Fixture Type III w/spill control	B3-U0-G5	35604	208	333	POLE	(NOTE 1 & 4)	OWNER
10	CC	COOPER	GLEON-AF-06-LED-E1-SL4-BZ-7050	6 Cube LED Site Fixture Type IV w/spill control	B3-U0-G5	33829	208	333	POLE	(NOTE 1 & 4)	OWNER
1	DD	COOPER	GLEON-AF-08-LED-E1-SL3-BZ-1200-7050	8 Cube LED Site Fixture Type III w/spill control	B3-U0-G5	52336	208	511	POLE	(NOTE 1 & 3)	OWNER
19	EE	COOPER	GLEON-AF-08-LED-E1-SL4-BZ-1200-7050	8 Cube LED Site Fixture Type IV w/spill control	B4-U0-G5	49727	208	511	POLE	(NOTE 1 & 3)	OWNER
15	AAF	CREE	CPY250-B-DM-D-E-UL-WH-57-HZ	WHITE LED CANOPY FIXTURE	B4-U3-G2	20080	208	145	CANOPY	NOTE 2	OWNER
15	AAB	CREE	CPY250-B-DM-D-B-UL-BZ-57-HZ	BRONZE LED CANOPY FIXTURE	B3-U2-G1	12860	208	96	CANOPY	NOTE 2	OWNER
1	PP	CROUSE-HINDS	VMV7L	EXPLOSION PROOF LED LIGHT FIXTURE			120	62	POLE	NOTE 5	OWNER

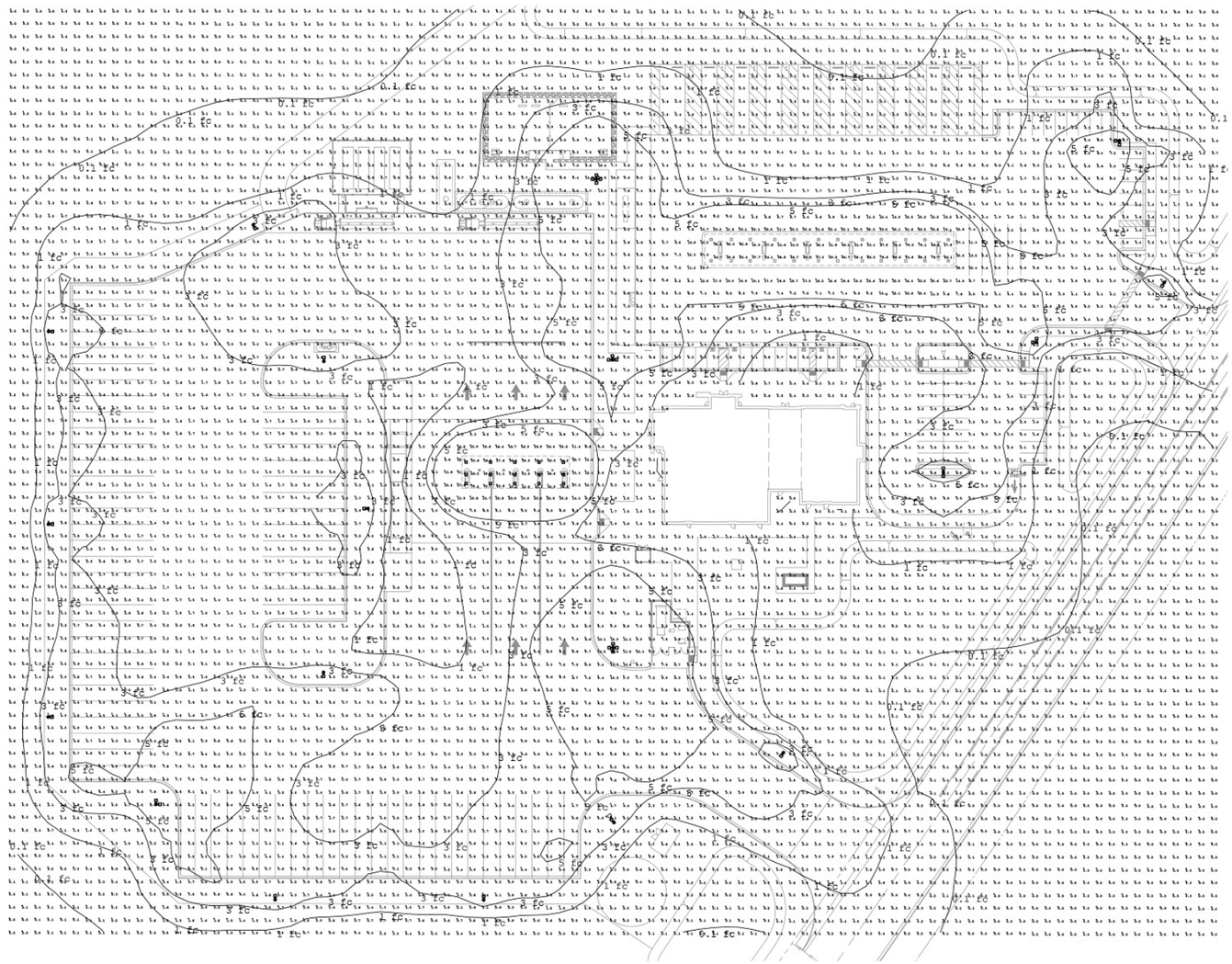
LIGHT FIXTURE NOTES:
1. REFER TO ARCH SITE (SP) SHEETS FOR LIGHT POLE FOUNDATION DETAILS.
2. CANOPY FIXTURES SHALL BE INSTALLED BY CANOPY CONTRACTOR, WIRING BY E.C.
3. POLE MOUNT (1 HEAD)-RTS9A39SFN1/(2 HEAD) RTS9A39SFN5/(3 HEAD) RTS9A39SFN4/(4 HEAD) RTS9A39SFN4
4. POLE MOUNT (1 HEAD) RTS8A30SFN1/(2 HEAD 180) RTS8A30SFN2/(2 HEAD 90) RTS8A30SFN5/(3 HEAD) RTS8A30SFN6/ (4 HEAD) RTS8A30SFN4
5. POLE MOUNT ON TELESCOPING SAFETY LIGHT POLE, CROUSE-HINDS MODEL V65B-G-JM5-T58

SITE LIGHTING POLE HEIGHTS

TYPE 'BB' ..... 30'-0"
TYPE 'CC' ..... 30'-0"
TYPE 'DD' ..... 39'-0"
TYPE 'EE' ..... 39'-0"
TYPE 'PP' ..... 10'-0"

CALCULATION SUMMARY

LABEL	CALC TYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN
OVERALL SITE	ILLUMINATIONS	FC	2.25	41.6	0.00	N/A	N/A
AUTO CANOPY	ILLUMINATIONS	FC	54.18	91.8	37.4	1.45	2.45
TRUCK CANOPY	ILLUMINATIONS	FC	42.51	51.7	33.6	1.27	1.54



Source: Image produced and provided by Harrison French &Associates, LTD in 2022; adapted by Ascent in 2024.

Figure 2-11 Photometrics

2.8 AGRICULTURE AND FORESTRY RESOURCES

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

2.8.1 Discussion

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?

According to the California Department of Conservation's California Important Farmland Finder (California Department of Conservation 2022), the project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Additionally, according to the Susanville Vicinity Area Plan, the site has a land use designation as Industrial Park. There would be no impacts associated with conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Therefore, implementation of the project would not convert farmland to urban use, and no impact to farmland would occur. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: No impact.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

Williamson Act contracts are formed between a county or city and a landowner for the purposes of restricting specific parcels of land to agricultural preserve areas. As mentioned in the response to inquiry 2.5.1.a), according to the Susanville Vicinity Area Plan, the site has a land use designation as Industrial Park and is not zoned for agricultural use or subject to a Williamson Act contract. Because there are no active Williamson Act contracts associated with the project site, and the site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, the project would not conflict with existing agricultural zoning or a Williamson Act contract. Therefore, no impacts related to agricultural zoning or a Williamson Act contract would occur due to implementation of the project. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of 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))?

As mentioned previously, the project site is designated as Industrial Park in the City's Area Plan and has a typical corresponding zoning district of Limited Industrial District (M-L). The proposed land use designation for the project would be Commercial District (C-2). The project site is not designated as forest land, timberland, or timberland zoned Timberland Production, and no loss of forest land or timberland would occur. The city has no such resources within its boundary. Therefore, implementation of the project would not conflict with existing zoning for forest land, timberland, or timberland zoned Timberland Production and impacts would not occur. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: No impact.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

As mentioned previously, no forest land exists within the city limits. As such, implementation of the project would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, implementation of the project would not result in the loss of forest land or conversion of forest land to non-forest use and impacts would not occur. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: No impact.

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?

As mentioned in the responses to inquiry 2.5.1 a) through d), there would be no impacts associated with the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. Therefore, implementation of the project would not conflict in the existing environment or conversion of land use and no impact would occur. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: No impact.

2.9 AIR QUALITY

CEQA INITIAL STUDY CHECKLIST QUESTIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
III. Air Quality.				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on 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?	☐	☐	☒	☐

2.9.1 Discussion

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

The proposed project is within the Northeast Plateau Air Basin, which comprises Lassen County, Modoc County, and Siskiyou County. Within the Basin, the Lassen County Air Pollution Control District (APCD) is the local air district governing the Lassen County region. The Air Quality Index in Lassen County is classified as "GOOD" for most of the year (APCD 2012). Events such as wildfires and inversion layers in winter months can periodically degrade air quality. There are no applicable air quality plans for the Northeast Plateau Air Basin or the Lassen County APCD; therefore, Lassen County is not subject to an air quality plan and thus there would be no conflict with or obstruction of the implementation of the applicable air quality plan. The project would have no impact. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: No impact.

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?

The State of California has issued air quality standards (California Ambient Air Quality Standards [CAAQS]) for ozone, particulate matter smaller than or equal to 2.5 and 10 microns in diameter ($PM_{2.5}$ and PM_{10}, respectively), carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. The federal government has issued standards (National Ambient Air Quality Standards [NAAQS]) for all of the state pollutants except visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

Lassen County is considered Unclassified/Attainment by NAAQS meaning the air quality in this geographic area meets or is cleaner than the national standard. The Air Quality analysis for the proposed project is currently ongoing; thus this issue will be analyzed in further detail in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

c) Expose sensitive receptors to substantial pollutant concentrations?

The California Air Resources Board (CARB) describes sensitive receptors as children, elderly, people who suffer from asthma, and others who are at a heightened risk of negative health outcomes due to exposure to air pollution. There are no sensitive receptor locations (hospitals, schools, and day care centers, or other locations that the air district board or California Air Resources Board may determine) within the proposed project boundary (California Health and Safety Code §42705.5(a)(5)).

The closest residences are located south of the proposed project on Sierra Road. As the Air Quality analysis for the proposed project is currently ongoing, this issue will be analyzed in further detail in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

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 depends on numerous factors, including the following: the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the affected 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 a substantial number of people to objectionable odors would be deemed to have a significant impact.

During the construction of the project, diesel trucks and off-road construction equipment may emit odors such as that of diesel exhaust, and odors would also be present from the laying of asphalt. Such odors would be intermittent and temporary and would dissipate rapidly from the source with an increase in distance, and thus would only be a temporary source of nuisance to adjacent uses and would not affect a substantial number of people. Given the temporary nature of construction activities and the distance of the sensitive receptors from the project site, project construction is not anticipated to result in an odor-related impact during the construction phase of the project.

While almost any source may emit objectionable odors, some land uses are more likely to produce odors because of their operation. Land uses more likely to produce odors include agriculture, chemical plants, composting operations, dairies, fiberglass molding manufacturing, landfills, refineries, rendering plants, rail yards, and wastewater treatment plants. The project would include two fast-food restaurants and would also include the presence of diesel trucks (for refilling the gasoline and diesel storage tanks, delivering goods to the convenience store and fast-food restaurants, and haulers refueling their trucks), plus the refueling of gasoline automobiles, RVs, and trucks, which could produce odors, though not at the same scale as the aforementioned land uses. Diesel trucks are restricted from idling for more than five minutes according to California Code of Regulations, Title 13, Section 2485, which would help reduce exhaust emission odors. The project would also need to adhere to Lassen County APCD Rule 4:2 regarding nuisance air contaminants. Finally, according to Susanville's wind rose (Meteoblue 2024), the predominant wind directions are from the west, west-north-west and west-south-west; thus any odors would mostly be blowing away from the project site and not towards nearby sensitive receptors.

Both project construction and operation are not anticipated to result in the frequent exposure to nearby sensitive receptors to substantial objectionable odors. Thus, this impact would be less than significant. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

2.10 BIOLOGICAL RESOURCES

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

2.10.1 Discussion

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

The analyses of project impacts to Biological Resources related to candidate, sensitive, special-status species, and federally- or state-listed endangered, threatened, or rare species are currently ongoing; thus, this issue will be analyzed in further detail in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

According to the National Wetlands Inventory Mapper, there are no riparian wetland areas located within or immediately adjacent to the project site (USFWS 2024). The potential closest mapped feature is the Susan River, associated forested/shrub wetland habitat and freshwater emergent wetland located (at the closest point), approximately 400 feet northeast from the project site. The site is predominantly flat, sloping towards the southeast at an average gradient of 0.5 percent. While there are wetlands in the vicinity of the project site to the north, these are of sufficient distance from proposed project developments as to not be impacted. Additionally, because the project site has a gradual slope to the southeast, any inadvertent spills or accidental releases of pollution would flow away from the riparian areas identified. Furthermore, the project site is not located in a USFWS-designated Critical Habitat for any threatened or endangered species, which are areas that contain features essential for the conservation of a threatened or endangered species and that may require special management and protection (USFWS 2022). The project site is disturbed and heavily populated with invasive plant species such as perennial pepperweed (*Lepidium latifolium*) and cheatgrass (*Bromus tectorum*) as well as Medusa head (*Elymus caput-medusae*) to a lesser extent. However, Ashy ryegrass - Creeping wildrye turfs (*Leymus cinereus - Leymus triticoides*) are a sensitive natural community identified in the study area. This vegetation alliance has a state rarity ranking of S3 (Vulnerable: moderate risk of extinction, restricted range, few populations) and is therefore considered a sensitive natural community under CEQA. Project activities (i.e., ground disturbance, vegetation removal, staging) could result in direct loss of this sensitive natural community. As such, this issue will be analyzed in further detail in the main body of the Draft EIR.

As identified in the Section 2.3.1 above (Offsite Improvements), offsite utilities would be brought to the site and would need to cross the Susan River, both via SR 36 and Skyline Road. The current intention is for utilities to be hung on the bridge, with County/Caltrans's permission. As no project construction is proposed within the Susan River corridor, a Clean Water Act Section 404 permit from the US Army Corps of Engineers (USACE) and a Section 401 Water Quality Certification from the Lahontan Regional Water Quality Control Board (RWQCB) would not be required. However, due to potential construction of offsite utilities on the banks of the Susan River, there is the possibility that per Fish and Game Code section 1602, a Lake or Streambed Alteration Agreement (LSAA) may be necessary. Fish and Game Code section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW prior to beginning any activity that may do one or more of the following:

1. substantially divert or obstruct the natural flow of the bed, channel, or bank of any river, stream or lake; or
2. substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or
3. deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

As part of the LSAA, it is likely that CDFW would request the inclusion of an inadvertent release contingency plan which would outline the steps to be taken in the event of an accidental spill or release of hazardous materials, like oil or chemicals, into the environment, with the primary focus on avoiding environmental damage and protecting wildlife. Therefore, should construction occur on the banks of the Susan River, adherence to the Fish and Game Code regulatory requirement for an LSAA, which includes notification to CDFW through the Environmental Permit Information Management System, provision of supplemental information such as plans, diagrams, maps, photos, studies and payment of LSAA notification fees, inclusion of an inadvertent release contingency plan and subsequent approval by CDFW prior to construction would ensure that implementation of the proposed project would be undertaken in a manner that is protective of the environment. As such, the project would have less than significant impacts to riparian habitats but a potentially significant impact to other sensitive natural communities. This issue will be analyzed further in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

According to the National Wetlands Inventory Mapper, there are no riparian wetlands or sensitive natural community areas located within or immediately adjacent the project site (USFW 2024). The potential closest mapped feature is the Susan River, associated forested/shrub wetland habitat and freshwater emergent wetland located (at the closest point), approximately 400 feet northeast from the project site. The site is predominantly flat, sloping towards the southeast at an average gradient of 0.5 percent. While there are wetlands in the vicinity of the project site to the north, these are of sufficient distance from proposed project developments as to not be impacted. Additionally, as mentioned previously, with a gradual slope to the southeast, any inadvertent spills or accidental releases of pollution would flow away from the riparian areas identified. However, because the route of the offsite utilities is yet to be confirmed, a formal delineation of the boundaries of potential state or federally protected wetlands within the project site might be necessary in the event the offsite utilities are not able to be hung on the bridge as planned. Therefore, although it is likely that implementation of the proposed project would have less than significant impacts to state or federally protected wetlands, due to an abundance of caution, this issue will be analyzed in further detail in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

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?

Wildlife corridors are features that exist as topographical or structural pinch points that, among other purposes, are utilized by wildlife for travel between one geographical area to the next. While these resources may support limited biological functions and are perhaps utilized strictly for travel purposes (for example, a dry culvert under a roadway or bridge), more often, they contain natural vegetation and habitats that support foraging, roosting, and breeding activities, as well. Very often, particularly in the case of riparian corridors, aquatic species depend entirely on these features to persist.

As noted in Section 2.1 (Project Information – Description of Project), the project site is located on an approximate 14.1-acre vacant parcel but is part of a larger 79.6-acre parcel (APN 107-280-017), meaning that should wildlife use the site as a migratory wildlife corridor or wildlife nursery site, they would still be able to move in the remaining 80 percent of the overall parcel. However, the presence of several barbed wire livestock fences from past use as pastureland would likely be a substantial impediment to wildlife using the site as a wildlife corridor, especially as the site is bounded to the east by a busy highway (SR 36). Additionally, other than installing the utilities potentially under the Susan River, the project should not impact the river or impact any migratory fish or other aquatic species. Fish and other aquatic species could still move through the area within the river channel as they do under current conditions. The former railroad embankment south of the project site would be unaffected by the proposed project which could potentially be used by wildlife, so the project would not create barriers to wildlife movement through the area and would not isolate or fragment any habitat areas. As such, wildlife corridors or any designated essential connectivity areas are not present within or in the immediate vicinity of the project site, and the proposed project would result in less than significant impacts to existing wildlife corridors or affect wildlife movement. For these reasons, this issue need not be addressed in the main body of the Draft EIR.

Significance of impact: Less than significant.

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

The landscaping requirement conditions set out in the Susanville Code of Ordinances Title 12, Article IV, Section 12.36.110 requires incorporation of a sufficient number of healthy trees, each at least one and one-fourth inches in diameter at six inches above the ground and at least eight feet in height with the crown in good balance with the trunk and be in healthy condition upon final inspection. Furthermore, removal of any tree greater than four inches or

greater in diameter at diameter breast height (diameter breast height is four and one-half feet above the ground) in the area of the new development shall require a permit under the procedures of Section 12.36.100. In the event there are no trees located on the site to be developed which are required to be protected under the provisions of Section 12.36.110, the applicant shall so state in his application for a "no tree" verification.
As there are no trees on site that would be affected by the proposed project, a "no tree" verification would be required and substantiated by an inspection of the site by the city prior to issuing grading permits. Project implementation would therefore have a less than significant impact on any local policies or ordinances protecting biological resources and further analysis of this issue in the main body of the Draft EIR is not warranted.

Significance of impact: Less than significant.

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?

According to CDFW (2023), there are no Natural Community Conservation Plans or Habitat Conservation Plans in Lassen County. Therefore, project implementation would have no impact to adopted biological plans and further analysis of this issue in the main body of the Draft EIR is not warranted.
Significance of impact: No impact.

2.11 CULTURAL RESOURCES

CEQA INITIAL STUDY CHECKLIST QUESTIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
V. Cultural Resources. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☒	☐	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

2.11.1 Discussion

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

Under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (Public Resources Code Section 21084.1; 14 California Code of Regulations (CCR; henceforth referenced as CEQA Guidelines) 15064.5(b)). If a site is listed or eligible for listing in the California Register of Historical Resources (CRHR), or included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of Public Resources Code Section 5024.1(q)), it is a historical resource and is presumed to be historically or culturally significant for the purposes of CEQA (CEQA Guidelines Section 15064.5(a)).

A search request from the Northeast Information Center (NEIC) has been undertaken to identify previously recorded sites and previous cultural resource studies documented within a one-mile radius of the project site, but the results of which are still awaited. As such, this potentially significant impact will be analyzed in greater detail in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

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

Archaeological resources are features, such as tools, utensils, carvings, fabric, building foundations, etc., that document evidence of past human endeavors and that may be historically or culturally important to a significant earlier community.

While relatively minimal amounts of grading would be needed as the project site is relatively flat, excavation for building foundations, the high-rise sign and the bioretention ponds would result in ground disturbance. The deeper the excavation, the more likely the risk of encountering archaeological resources. As the search request results from the NEIC are still awaited, this potential impact will be analyzed in greater detail in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

As previously indicated, the project site is relatively flat; nevertheless, the project would require excavation to a depth of approximately 10 feet that would extend into native soils, with the potential to encounter previously unknown human remains. A number of existing regulatory provisions mandate requirements for the handling of human

remains inadvertently uncovered during excavation activities. These include State Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and CEQA Guidelines Section 15064.5(e). Pursuant to these codes, in the event of the discovery of unrecorded human remains during construction, excavations shall be halted, and the County Coroner shall be notified. If the human remains are determined to be Native American, the California Native American Heritage Commission (NAHC) would be notified within 24 hours and the guidelines of the NAHC would be adhered to in the treatment and disposition of the remains. Compliance with these regulatory protocols would ensure that impacts on human remains would be less than significant, and this issue need not be evaluated further in the main body of the Draft EIR.

Significance of impact: Less than significant.

2.12 ENERGY

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

2.12.1 Discussion

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The project would result in energy demand from the use of construction equipment for a temporary period of approximately 12 months. Energy demand from the use of transportation fuels from construction activities would be generated by the operation of vehicles and equipment used for various construction activities, such as excavation and grading. Electricity would be consumed to power construction trailers (lights, electronic equipment, and heating and cooling) and exterior uses such as mobile lighting masts, conveyance of water for dust control, and any electrically driven construction equipment. Construction-related energy and transportation fuel demand from construction equipment would vary depending on factors such as the type and number of equipment and the time duration that each equipment is powered on and used. Electricity would only be used for necessary construction-related activities and would be limited to working hours. Natural gas would not be consumed during construction of the project.

Construction equipment and trucks would be required to comply with applicable provisions of regulations to improve fuel efficiency, including the Phase 1 and Phase 2 heavy-duty truck standards. Furthermore, trucks would need to comply with the 2004 CARB Airborne Toxic Control Measure (ATCM) to limit heavy-duty diesel motor vehicle idling to 5 minutes or less at any given location. Therefore, construction of the project would not result in the wasteful, inefficient, or unnecessary consumption of transportation fuel resources and impacts would be less than significant. No further analysis of construction energy is warranted in the main body of the Draft EIR.

Operation of the project would generate additional daily trips from visitors traveling to and from the site and delivery vehicles for the convenience store and fast-food restaurant and delivering fuel. The project would provide EV-capable, EV-ready and full EV charging stations per CALGreen code requirements at the time the building permit is issued, which would encourage the use of alternatively fueled vehicles, thus reducing the amount of transportation fuels.

During operation of the proposed project, electricity would be consumed for the operation of the convenience store and fast-food restaurants, including electricity for building lighting, heating/cooling, water conveyance, and wastewater treatment. Building lighting would be energy efficient (i.e., light-emitting diode [LED]) and other equipment installed would be new and designed to meet applicable current energy standards for such equipment. Energy saving and sustainable design features would be incorporated into the project as the proposed buildings would comply with the applicable CALGreen code requirements. In addition to energy-efficient lighting, design features would also include elements such as ENERGY STAR appliances, low flow faucets and water-efficient landscape design with weather-based controllers and drip irrigation systems.

As the number of total trips and energy use associated with operation has not been assessed, this potential impact will be analyzed in greater detail in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. With respect to truck fleet operators, the United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA) have adopted fuel efficiency standards for medium- and heavy-duty trucks. The Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles, and are phased in for model years 2014 through 2018 and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type (USEPA 2011). USEPA and NHTSA also adopted the Phase 2 heavy-duty truck standards, which would be phased in from model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type (USEPA 2016). In June 2020, the Advanced Clean Trucks (ACT) regulation was approved by CARB, which mandates zero-emission vehicle (ZEV) sales requirements for truck manufacturers and a one-time reporting requirement for large entities and fleets. The ACT regulation has different truck sales requirements for the different vehicle groups. Manufacturers will need to increase their percentage of ZEVs in order to achieve 55 percent of Class 2b– 3 truck sales, 75 percent of Class 4–8 Vocational straight truck sales, and 40 percent of Class 7–8 Tractor sales by 2035. The regulation is designed to accelerate widespread adoption of ZEVs in the medium- and heavy-duty truck sector to reduce on-road mobile source emissions on the path to carbon neutrality by 2045 (Executive Order B-55-18). These regulations would have an overall beneficial effect on reducing fuel consumption from trucks over time as older trucks are replaced with newer models that meet the standards. In addition, construction equipment and trucks are required to comply with CARB regulations regarding heavy-duty truck idling limits of five minutes at a location and the phase-in of off-road emission standards that result in an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines. Although these regulations are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in the efficient use of construction related energy.

As discussed above, the project is designed in a manner that is consistent with and not in conflict with relevant energy conservation plans that are intended to encourage development that results in the efficient use of energy resources. The project would comply with applicable regulatory requirements for the design of new buildings, including the provisions set forth in the Title 24 standards and CALGreen Code. The project's energy-efficient features would include, but would not be limited to, water-efficient landscape design, high-efficiency plumbing fixtures and weather-based controller and drip irrigation systems to promote a reduction of indoor and outdoor water use; EV charging, EV capable and EV ready spaces; bicycle facilities that would meet or exceed the respective City codes; Energy Star–labeled appliances, where possible; and energy-efficient and water conserving HVAC systems. Although the City of Susanville General Plan, which would be the operative document if the project is approved by the City and the annexation is approved by LAFCO does not contain energy-efficiency policies, the project would also be consistent with and not conflict with regional or local planning strategies that address energy conservation, such as the Lassen County Energy Element.

With respect to operational transportation-related fuel usage, the project would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles. The project would also benefit from fuel and automotive manufacturers' compliance with CAFE fuel economy standards and the Pavley Standards, which are designed to result in more efficient use of transportation fuels. The project's design would comply with existing energy standards and incorporate features to reduce energy consumption. Therefore, the project would not conflict with energy conservation plans and impacts would be less than significant. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

2.13 GEOLOGY AND SOILS

CEQA INITIAL STUDY CHECKLIST QUESTIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VI. Geology and Soils.				
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), 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?	☒	☐	☐	☐

2.13.1 Discussion

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 California Geological Survey Special Publication 42.)

A fault is a plane or surface in the earth in which failure has occurred and materials on opposite sides have moved relative to one another in response to the accumulation and release of stress. The United States Geological Survey (USGS) defines active faults as those that have had surface displacements within the Holocene epoch (about the last 11,700 years). Potentially active faults are those that have had surface displacement during Quaternary time, within the last 1.6 million years. California Geological Survey (CGS) policy is to delineate a boundary from 200 to 500 feet wide on each side of the Holocene-Active fault trace.

The Geotechnical Investigation Report (Reno Tahoe Geo Associates, Inc. 2022; see Appendix A) notes the USGS Quaternary Faults map shows unnamed fault segments of the Susanville – Eagle Lake area approximately 1.5-miles west of the site. These Class A faults have undergone undifferentiated Quaternary movement with unspecified movement intervals. The Geotechnical Investigation Report notes no active faulting has been mapped beneath the project site.

The Lassen County Multi-Jurisdictional Hazard Mitigation Plan Update (2018) notes the City of Susanville is located within the Honey Lake Fault Zone and that eight (8) quadrangle maps delineating Alquist-Priolo Earthquake Fault Zones are within the Susanville area. However, all of these quadrangle maps are southeast of the project site, with the closest quadrangle to the east of Lake Leavitt, approximately 7.2-miles southeast of the project site. The project site does not lie within a designated Alquist Priolo Earthquake Fault Zone.

Based on these considerations, the potential for surface ground rupture exists at the project site given the potentially active faults nearby. Nonetheless, the project will be designed with earthquake structural design components required by the California Building Code (CBC), in order to protect against significant cosmetic damage and serious economic loss, which in turn, would help protect health and safety of humans who may be in or near the building. Therefore, less than significant impacts would result from fault rupture of a known earthquake fault directly on the project site and with project design being in accordance with building code requirements, less than significant impacts would occur. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

ii) Strong seismic ground shaking?

The project site lies within an area with a high potential for strong earthquake shaking from large earthquakes in western Nevada and eastern California. The maximum possible earthquake in this area that could occur locally would be in the range of magnitude 7.0 to 8.0 along the Honey Lake Fault Zone with an epicenter located approximately 20 miles southeast of the site.

The project includes the construction of new elements which could experience moderate to high ground motion from local or regional faults. Although some structural damage is typically not avoidable during a large earthquake, the proposed construction elements would be built to meet existing construction ordinances and the most recent CBC in order to protect against building collapse and major injury during a seismic event. The CBC includes specific design measures, which are based on the determination of Site Classification and Seismic Design Categories specific to the project site. These design measures are intended to maximize structural stability in the event of an earthquake. Furthermore, the project would comply with the CGS Special Publication 117A, *Guidelines for Evaluating and Mitigating Seismic Hazards in California* (CGS 2008), which provides guidance for evaluation and mitigation of earthquake-related hazards.

In addition, a final design-level geotechnical report would be prepared and approved by the City prior to issuance of building permits, and would be based on the final construction and building plans. Implementation of the site-specific structural and seismic design parameters and recommendations for foundations of the final design-level geotechnical report would further ensure that seismic-related ground shaking impacts would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death. Therefore, adherence to regulatory requirements would reduce impacts related to strong seismic shaking to a less than significant level. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

iii) Seismic-related ground failure, including liquefaction?

Liquefaction is a phenomenon in which unconsolidated, water-saturated sediments become unstable due to the effects of strong seismic shaking. During an earthquake, these sediments can behave like a liquid, potentially causing severe damage to overlying structures. Lateral spreading is a variety of minor landslide that occurs when unconsolidated liquefiable material breaks and spreads due to the effects of gravity, usually down gentle slopes. Liquefaction-induced lateral spreading has been defined as the finite, lateral displacement of gently sloping ground as a result of pore-pressure buildup or liquefaction in a shallow underlying deposit during an earthquake. The occurrence of this phenomenon is dependent on many complex factors, including the intensity and duration of ground shaking, particle-size distribution, and density of the soil. In general, a relatively high potential for liquefaction exists in loose, sandy soils that are within 50 feet of the ground surface and are saturated (below the groundwater table).

The potential damaging effects of liquefaction include differential settlement, loss of ground support for foundations, ground cracking, heaving and cracking of structure slabs due to sand boiling, and buckling of deep foundations due to ground settlement. Dynamic settlement (i.e., pronounced consolidation and settlement from seismic shaking) may also occur in loose, dry sands above the water table, resulting in settlement of and possible damage to overlying structures. Lateral spreading can move blocks of soil, placing strain on buried pipelines that can lead to leaks or pipe failure.

The liquefaction analysis conducted as part of the Geotechnical Investigation Report noted that because the site subsurface sandy soils are unsaturated to 18 to 20 feet depth, and soils below 15 feet depth to 35 feet depth are primarily medium- to high-plasticity clays, the potential for liquefaction is minor to negligible. Therefore, impacts related to liquefaction would be less than significant and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

iv) Landslides?

The geologic and topographic characteristics of an area often determine its potential for landslides. Landslides (or slope failure) refer to the dislodging and falling of a mass of soil or rocks along a sloped surface. Although the potential for small-scale slope failure may exist particularly along stream banks, margins of drainage channels, and similar settings where steep banks or slopes occur, the flat terrain of the project site minimizes this potential geologic hazard. Therefore, given the project site's topography, impacts to seismically induced landslides would not occur. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: No impact.

b) Result in substantial soil erosion or the loss of topsoil?

Upon completion, the project site will be mostly impervious and there would not be open spaces with exposed topsoil. Construction activities would require some grading, excavation, and other construction activities that have the potential to disturb existing soils within the project site and expose these soils to rainfall or wind during construction, thus having the potential for soil erosion. Standard erosion controls would be imposed during site preparation and grading activities. Soil erosion via wind would be minimized through soil stabilization measures required by Lassen County Air Pollution Control District Rule 4:18 – Fugitive Dust Emissions, such as applying asphalt, oil, water or suitable chemicals to dirt roads, material stockpiles, land clearing, excavation, grading or other surfaces which can give rise to airborne dusts. Potential for water erosion would be reduced by implementation of standard erosion control measures imposed during site preparation and grading activities. Construction activities would be carried out in accordance with applicable standard erosion control practices required pursuant to the CBC and the requirements of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit issued by the Lahontan Regional Water Quality Control Board (RWQCB), as applicable. Consistent with these requirements, due to project construction activities resulting in one acre or more of land disturbance, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared that incorporates BMPs to control erosion during the project's construction period. Any BMPs included as part of the SWPPP would thus be implemented as part of the project. Following project construction, the project site would be covered completely by paving, structures, and landscaping, and would generate little if any soil erosion.

Thus, impacts due to erosion of topsoil would be less than significant, as the project would comply with applicable regulatory requirements. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

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?

Unstable geologic units or soils commonly occur when there are landslides, lateral spreading, subsidence/collapse, or liquefaction.

Landslides

The geologic and topographic characteristics of an area often determine its potential for landslides. Landslides (or slope failure) refer to the dislodging and falling of a mass of soil or rocks along a sloped surface. Although the potential for small-scale slope failure may exist particularly along stream banks, margins of drainage channels, and similar settings where steep banks or slopes occur, the relatively flat terrain of the project site minimizes this potential geologic hazard. Therefore, given the project site's topography, seismically induced landslides would not pose a danger to the people or structures onsite. Therefore, no impacts would result, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Lateral Spreading

Lateral spreading movement occurs when a soil mass slides laterally on liquefied soil layers, moving downslope or towards a free face. The project site is not located within a liquefaction hazard zone and therefore, there is limited potential for lateral spreading to occur at the project site. Based on the liquefaction analysis conducted as part of the Geotechnical Investigation Report, discussed in response to inquiry a.iii above, the potential for liquefaction on the project site is unlikely. Additionally, the project would be built subject to the seismic design criteria of the most recent CBC. The CBC includes provisions that would reduce lateral spreading impacts onsite. Therefore, lateral spreading impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Subsidence/Collapse

Subsidence or collapse is the sinking of the ground surface caused by the compression of earth materials resulting from manmade activities, such as groundwater or oil and gas withdrawal. The resulting compression typically occurs only once within affected soils and cannot be repeated during fluctuations of the groundwater level or from peat oxidation.

Based on borehole drilling undertaken at the site as part of the Geotechnical Investigation Report, near surface deposits are composed primarily of 5 to 15 feet of medium- to high-plasticity clays and silts with lesser layers of interbedded silty sand and sand/silt. Between 15 feet depth and 30 to 35 feet depth, the soil consisted of lightly-overconsolidated soft to firm fat clay. This material has high water contents and low strength and will be subject to consolidation settlements under additional site loads. Options to limit settlement on the project site would include limiting the thickness of fill placed for construction. It is assumed that a lightly loaded single-story building would have distributed loading of the deeper soil layers that is roughly equivalent to placement of one foot of fill. Buried structures and tanks would theoretically decrease the weight of existing fill and soil and would not increase the predicted settlement. The high mast sign is also assumed to have loads that are distributed over considerable width and would not increase settlement potential.

The Geotechnical Investigation Report recommended the method of foundation support for the single-story structure, canopy structures, buried tank, environmental or fuel vaults (assumed to not exceed 8 to 10 feet depth), and the high-rise sign would be spread footings. Additionally, the project would be constructed in conformance with the most recently adopted CBC, which includes provisions to reduce subsidence and collapse impacts, and applicable recommendations made in the Geotechnical Investigation Report prepared for the project. Therefore, subsidence and collapse impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Liquefaction

Liquefaction is a phenomenon that occurs when soil undergoes transformation from a solid state to a liquefied condition due to the effects of increased pore-water pressure. This typically occurs where susceptible soils (particularly soils in the medium sand to silt range) are located over a high groundwater table. Because the site subsurface sandy soils are unsaturated to 18 to 20 feet depth, and soils below 15 feet depth to 35 feet depth are primarily medium- to high-plasticity clays, the potential for liquefaction is minor to negligible. However, to ensure that the project would not experience structural damage due to liquefaction, the project would be designed and constructed in conformance with the most recently adopted CBC, which would ensure liquefaction impacts are less than significant. Thus, impacts related to liquefaction, as discussed in Response to inquiry a.iii above, would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

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

Expansive soil is characterized by a clay composition whereby clay particles expand dramatically upon wetting. Structures constructed on expansive soils require special design considerations that are identified within the CBC. The Geotechnical Investigation Report determined expansive clays will require separation from footings and pavements by at least 2 feet of compacted granular fill, including the thickness of aggregate base and subbase layers. Nonetheless, to ensure that the proposed development would not experience structural damage due to expansive soil, the project would be designed and constructed in conformance with the most recently adopted CBC. Therefore, impacts related to expansive soils would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

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?

The project site is located on the outskirts of an urbanized area where municipal wastewater infrastructure already exists, although the project would need to install connections to the sewer. The project would not include the use of any septic tanks; additional wastewater output would be connected and treated by Susanville Sanitary District wastewater treatment system. With the inclusion of the bioretention basins, the proposed stormwater drainage system would be capable of handling existing and proposed stormwater volumes from the project site. Therefore, impacts related to septic tanks would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Paleontological resources or fossils are the remains, imprints, or traces of once-living organisms preserved in rocks and sediments. A review of the Preliminary Geologic Map of the Susanville 30' x 60' Quadrangle, California (CGS 2013) shows the project site is underlain by alluvium (Qa), and near-shore deposits of Lake Lahontan (Qpl). Alluvium deposits are Holocene-age (less than 11,000 years old) and include surficial deposits made up of variable compositions of clay, silt, sand, and gravel. Holocene-age sediments are typically too young to contain fossilized material (SVP 2010), although they may overlie sensitive older (e.g., Pleistocene) deposits at variable depth. Therefore, Holocene-age sedimentary deposits are considered to have a low potential for producing significant paleontological resources based on the BLM's Potential Fossil Yield Classification (PFYC) system definitions (2016).

Qpl deposits are old sedimentary deposits of Pleistocene-age (approximately 2.51 million years to 11,000 years old) and include deposits consisting of variable compositions of clay, silt, sand, and gravel. Numerous taxa have been

recovered from Pleistocene-age deposits throughout Lassen County, according to the University of California Museum of Paleontology (UCMP 2024). Therefore, Pleistocene-age sedimentary deposits are considered to have a moderate potential for producing paleontological resources under the PFYC system.

With regard to the project site, UCMP has a record of giant bison (*Bison latifrons*) and a Pleistocene pika jaw (*Ochotona sp*.) in the Susanville vicinity (UCMP 2024), and although grading and excavation would not be to a significant depth (approximately 10 ft), there is the potential that paleontological resources could be present in older Pleistocene-age deposits underlying the project site. As such, this potentially significant impact will be analyzed in greater detail in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

2.14 GREENHOUSE GAS EMISSIONS

CEQA INITIAL STUDY CHECKLIST QUESTIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VII. Greenhouse Gas Emissions.				
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

2.14.1 Discussion

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

Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern with GHGs is that increases in their concentrations are causing global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most in the scientific community agree that there is a direct link between increased emissions of GHGs and long-term global temperature increases.

The State of California defines GHGs as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Because different GHGs have different global warming potentials (GWPs) and CO_2 is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO_2 equivalents (CO_2e). For example, CH_4 has a GWP of 25 (over a 100-year period); therefore, 1 metric ton (MT) of CH_4 is equivalent to 25 MT of CO_2 equivalents ($MTCO_2e$). The State uses the GWP ratios available from the United Nations Intergovernmental Panel on Climate Change (IPCC) and published in the Fourth Assessment Report (AR4) (IPCC 2007). By applying the GWP ratios, project-related CO_2e emissions can be tabulated in metric tons (MT) per year. Large emission sources are reported in million metric tons (MMT) of CO_2e.

The Greenhouse Gas Emissions analysis for the proposed project is currently ongoing, thus this issue will be analyzed in further detail in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

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

Neither the Lassen County General Plan nor the Susanville Vicinity Area Plan identify specific GHG or climate change policies or goals. As of the writing of this Initial Study, the City of Susanville General Plan, which would be the operative document if the project is approved by the City and the annexation is approved by LAFCO, also does not identify specific GHG or climate change policies or goals. However, the general plan is in the process of being updated but is not scheduled for public release until the middle of 2025. Therefore, in the absence of any adopted, quantitative threshold, the proposed project would not have a significant effect on the environment if the proposed project is found to be consistent with the applicable regulatory plans and policies to reduce GHG emissions, including CARB's 2022 Scoping Plan for Achieving Carbon Neutrality (Scoping Plan) (CARB 2022).

2022 Scoping Plan

Jurisdictions taking meaningful climate action aligned with the State's climate goals in the absence of a CEQA-qualified Climate Action Plan should also look to the three priority areas to reduce GHG emissions: transportation electrification, VMT reduction, and building decarbonization. To assist local jurisdictions, the 2022 Scoping Plan, Appendix D of the Scoping Plan presents a non-exhaustive list of impactful GHG reduction strategies that can be implemented by local governments within the three priority areas (Priority GHG Reduction Strategies for Local Government Climate Action Priority Areas).

Transportation Electrification

The priority GHG reduction strategies for local government climate action related to transportation electrification are discussed below and would support the Scoping Plan action to have 100 percent of all new passenger vehicles to be zero emissions by 2035 (see Table 2-1 of the 2022 Scoping Plan). The CARB approved the Advanced Clean Cars II rule, which codifies Executive Order N79-20 and requires 100 percent of new cars and light trucks sold in California be zero emission vehicles by 2035. The State has also adopted AB 2127, which requires the CEC to analyze and examine charging needs to support California's EVs in 2030. This report would help decision-makers allocate resources to install new EV chargers where they are needed most. The project is designed in a manner that is consistent with and not in conflict with transportation electrification strategies. The project would include solar panels, EV charging, EV capable and EV ready spaces, as well as bicycle facilities that would meet or exceed the respective City codes. EV spaces are to be provided as required by the building code in effect at the time of project approval, and a proportion of those spaces would be designated as EVCS based on the requirements of Section 5.106.5.3 of the CALGreen Code.

VMT Reduction

The priority GHG reduction strategies for local government climate action related to VMT reduction are discussed below and would support the Scoping Plan action to reduce VMT per capita 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045.

The project site is within 0.5-miles of a bus stop (Safeway Shopping Center), which is served by the Susanville City Route, Susanville City Route 'Express', and the West Country route which links Chester to the west and Susanville. Additionally, the project would include bicycle parking stalls to serve the users of the community and further reduce VMT.

Building Decarbonization

The priority GHG reduction strategies for local government climate action related to electrification are discussed below and would support the Scoping Plan actions regarding meeting increased demand for electrification without new fossil gas-fire resources and all electric appliances beginning in 2026 (residential) and 2029 (commercial) (see Table 2-1 of the Scoping Plan). California's transition away from fossil fuel–based energy sources will bring the project's GHG emissions associated with building energy use down to zero as our electric supply becomes 100 percent carbon free. California has committed to achieving this goal by 2045 through SB 100, the 100 Percent Clean Energy Act of 2018. SB 100 strengthened the State's Renewables Portfolio Standard (RPS) by requiring that 60 percent of all electricity provided to retail users in California come from renewable sources by 2030 and that 100 percent come from carbon-free sources by 2045. The land use sector will benefit from RPS because the electricity used in buildings will be increasingly carbon-free, but implementation does not depend (directly, at least) on how buildings are designed and built.

As mentioned, the City of Susanville General Plan does not identify specific GHG or climate change policies or goals. While the project would not be subject to Lassen County's General Plan Energy Element (1993), which proposes *Energy Conservation Policies*, the project would endeavor to maximize solar access and minimize the need for heating, cooling and lighting, and the buildings would be oriented with windows on the southern walls to allow for passive solar heating and cooling, in line with the *Energy Conservation Policies*. Additionally, CALGreen and Title 24 of the California Code of Regulations sets forth mandatory energy standards for new development that the project would need to adhere to.

The project would not conflict with the CARB 2022 Scoping Plan, nor any policies of the Lassen County General Plan nor any policies of the Susanville Vicinity Area Plan and the City of Susanville General Plan by default as it does not identify specific GHG or climate change policies or goals. As such, impacts would be less than significant. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

2.15 HAZARDS AND HAZARDOUS MATERIALS

CEQA INITIAL STUDY CHECKLIST QUESTIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VIII. Hazards and Hazardous Materials.				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

2.15.1 Discussion

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

Exposure of the public or the environment to hazardous materials could occur through any of the following: improper handling or use of hazardous materials or hazardous wastes, particularly by untrained personnel; a transportation accident; environmentally unsound disposal methods; or fire, explosion, or other emergencies. The severity of potential effects varies with the activity conducted, the concentration and type of hazardous material or wastes present, and the proximity of sensitive receptors.

Project construction could expose construction workers and the public to temporary hazards related to the transport, use, and maintenance of construction materials (i.e., oil, diesel fuel, and transmission fluid), and/or handling/transport of demolition debris and import/export of soils. However, these activities would be short-term, and the materials used would not be in such quantities or stored in such a manner as to pose a significant safety hazard. Project construction activities would demonstrate compliance with the applicable laws and regulations governing the use, storage, and transportation of hazardous materials/waste, ensuring that all potentially hazardous materials are used and handled in an appropriate manner.

Based on a review of the historical reference documents, a site visit, interviews, and the EDR report, the Phase I Environmental Site Assessment revealed no evidence of recognized environmental conditions (RECs) associated with the project site (Reno Tahoe Geo Associates, Inc 2022). Per the Phase I, a REC is defined as "the presence or likely presence of hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property." The term includes the presence of hazardous substances or petroleum products even under conditions in compliance with laws. The Phase I also assessed historical RECs. Historical RECs can be defined as past releases of hazardous substances or petroleum products which have been remediated. Additionally, a review of available aerial photographs and the site visit on January 12, 2022, did not reveal obvious signs of dumping, spilling, leaking, storage or disposal of hazardous materials or wastes on site.

According to Geotracker (CSWRCB 2024), the State Water Board's database system used to track and archive compliance data related to authorized and unauthorized discharges, there are no records on the project site. There are two open sites nearby, one associated with the Sierra Pacific Industries sawmill to the northwest and one associated with Allied Petroleum to the east, both a considerable distance (over 0.3-miles) from the project site and not likely to affect the project site. Additionally, the project would need to be in full compliance with all applicable federal, state, and local requirements concerning the use, storage, and management of hazardous materials, including, but not limited to the Resource Conservation and Recovery Act (RCRA), Hazardous Materials Transportation Act (HMTA), California Hazardous Waste Control Law, federal and state Occupational Safety and Health Acts, Lassen County APCD rules, and permits and associated conditions issued by the City of Susanville. Through compliance with these existing legal and regulatory requirements, construction impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Operation of the project would involve the routine transport, use, and disposal of hazardous materials including refueling of vehicles; fuel delivery, which would occur approximately 3-4 gasoline deliveries and 12-14 diesel deliveries per week; and landscaping and site maintenance activities. The travel center would include a 12-position passenger vehicle fueling station and a 4-position truck fueling station. The 16 fueling positions would be supplied by a 30,000-gallon below ground gasoline storage tank, including fuel delivery parking; four 12,000-gallon above-ground diesel storage tanks for truck fueling, including fuel delivery parking; a 20,000 two-compartment split tank with 12,000 gallons of diesel for automobiles and 8,000 of premium unleaded for automobiles; and a 20,000-gallon diesel exhaust fluid storage tank. In addition, the RV park would include a 1,000-gallon propane tank.

The project would be subject to standard regulations related to the routine transportation, storage, and dispensing of gasoline. Fuel pump dispensers would be required to be equipped with automatic shutoffs and other safety devices and signage, as required by Fire, Building, and Health codes. All USTs would be double walled and all above ground fuel storage tanks would be surrounded by fencing. In accordance with Title 23, Section 2635(b) of the CCR, USTs would be required to have spill containment and overfill prevention systems. Fuel tank storage areas would have appropriate safety design, equipment, and signage to protect public health and safety from leaks, fires, or spills involving vehicle fuel if any were to occur on the project site. In accordance with NPDES requirements, a SWPPP would be prepared and would include BMPs designed to prevent project-generated pollutants from entering stormwater and moving off-site into receiving waters throughout the construction and operation of the project.

As described in Title 49 of the CFR and implemented by Title 13 of the CCR, the USDOT Office of Hazardous Materials Safety has established strict regulations for the safe transportation of hazardous materials. Appropriate documentation for all hazardous waste that is transported in connection with project activities would be provided as required for compliance with existing hazardous materials regulations. Hazardous wastes produced on site are subject to

requirements associated with accumulation time limits, proper storage locations and containers, and proper labeling. Additionally, for removal of hazardous waste from the site, hazardous waste generators are required to use a certified hazardous waste transportation company, which must ship hazardous waste to a permitted facility for treatment, storage, recycling, or disposal. Furthermore, the State of California requires all businesses that handle more than a specified amount of hazardous materials or extremely hazardous materials, to submit a Hazardous Materials Business Emergency Plan (HMBEP) to its local Certified Unified Program Agency (CUPA). The project would thus need to adhere to this regulation. The HMBEP must include an inventory of the hazardous materials used in the facility, and emergency response plans and procedures to be used in the event of a significant or threatened significant release of a hazardous material. The HMBEP must also include a Material Safety Data Sheet for each hazardous and potentially hazardous substance used, which summarizes the physical and chemical properties of the substances and their health impacts. In the event of an accidental release of hazardous materials, the HMBEP requires immediate notification to all appropriate agencies and personnel of a release, identification of local emergency medical assistance appropriate for potential accident scenarios, contact information of all company emergency coordinators of the business, a listing and location of emergency equipment at the business, an evacuation plan, and a training program for business personnel.

In addition, the routine use of small quantities of potentially hazardous materials typical of those used in fast-food and convenience store facilities, including cleaning products, paints, cooking oils and potentially chemicals used for maintenance of landscaping, would also occur. Such use would be consistent with those currently occurring at other nearby commercial and residential properties. The limited common hazardous materials used by the project can typically be disposed of at Class II or III landfills, which accept most common waste materials, such as those identified above. In addition, all hazardous materials used on the project site during operation would be used, stored, and disposed of in accordance with all applicable federal, state, and local requirements.

Given measures taken to improve the safety of USTs and fuel storage areas; compliance with applicable regulations which would reduce impacts associated with the use, transport, storage, and sale of hazardous materials; and the handling of hazardous materials in accordance with the HMBEP, impacts associated the routine transport, use, and disposal of hazardous materials would be less than significant and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

During excavation, on-site grading, and building construction, hazardous materials such as fuel and oils associated with construction equipment, as well as coatings, paints, adhesives, and caustic or acidic cleaners, could be used, and therefore, would require proper handling and management and, in some cases, disposal. The use, handling, storage, and disposal of these materials could increase the opportunity for hazardous materials releases and, subsequently, the exposure of people and the environment to hazardous materials. However, as previously discussed, all potentially hazardous materials used during construction of the project would be used and disposed of in accordance with manufacturers' specifications and instructions, thereby reducing the risk of hazardous materials use. In addition, the project would comply with all applicable federal, State, and local requirements concerning the use, storage, and management of hazardous materials. Based on the above, compliance with existing regulations would ensure the project construction activities would not 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. Furthermore, the maximum depth of excavation would be to approximately 10 feet, and according to the Phase I ESA, groundwater was encountered at depths of 18 to 20 feet during geotechnical drilling; thus it is unlikely that upset and/or accident conditions would involve the release of hazardous materials into groundwater during construction.

Operation of the project would involve the routine use of small quantities of potentially hazardous materials typical of those used in fast-food and convenience store commercial uses along with fuels and propane. As stated previously, activities involving the handling and disposal of hazardous waste would occur in compliance with all applicable federal, state, and local requirements concerning the handling and disposal of hazardous waste. With applicable

regulations and requirements compliance, operational activities would not 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. Impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Some populations (e.g., children, elderly, sick or disabled persons) are more susceptible to health effects of hazardous materials than the general population. Hazardous materials used near schools, day care centers, senior living communities, hospitals, etc., must consider potential health effects to these populations, often referred to as "sensitive receptors." Construction or redevelopment on contaminated properties that could potentially generate vapors or fugitive dust containing contaminants may potentially pose a health risk to these populations. In addition, commercial businesses in proximity to sensitive receptors may have hazardous emissions or handle hazardous or acutely hazardous materials or wastes that could pose a health risk to these sensitive receptors.

There are no schools, day care centers, senior living communities or hospitals within 0.25-miles of the project site, with Susanville Nursing & Rehabilitation at 2005 River Street the closest facility at approximately 1-mile from the project site. While construction and operation may handle hazardous or acutely hazardous materials and transport such material along SR 36, which would pass within 0.25-miles of the Susanville Nursing & Rehabilitation and schools such as Lassen High School, compliance with state and federal requirements would ensure that potential hazardous impacts to occupants at adjacent or nearby sensitive receptors would be less than significant. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

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?

Section 65962.5 of the California Government Code requires the California Environmental Protection Agency to develop and update annually the Cortese List, which is a "list" of hazardous waste sites and other contaminated sites. While Section 65962.5 makes reference to the preparation of a "list," many changes have occurred related to web-based information access since 1992 and information regarding the Cortese List is now compiled on the websites of multiple agencies, such as the Department of Toxic Substances Control (DTSC), the State Water Board, and CalEPA. The DTSC maintains the EnviroStor database, which includes sites on the Cortese List and also identifies potentially hazardous sites where cleanup actions (such as a removal action) or extensive investigations are planned or have occurred. The database provides a listing of Federal Superfund sites (National Priorities List); State Response sites; Voluntary Cleanup sites; and School Cleanup sites. Geotracker is the State Water Resources Control Board's data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (USTs, Department of Defense, Site Cleanup Program) as well as permitted facilities such as operating USTs and land disposal sites. CalEPA's database includes lists of sites with active Cease and Desist Orders or Cleanup and Abatement Orders from the State Water Board.

The project site is not on the Cortese List, although as noted previously, according to Geotracker (CSWRCB 2024), there are two open sites nearby, one associated with the Sierra Pacific Industries sawmill to the northwest and one associated with Allied Petroleum to the east, both a considerable distance (over 0.3-miles) from the project site, particularly the Allied Petroleum site to the east which is beyond SR 36. Although the project site slopes to the southeast, in 13 borings undertaken for the project's Geotechnical Investigation Report, the deepest of which was to 40 feet, none of which revealed any presence of hydrocarbons or odors that would potentially indicate the presence of hazardous materials below the site. Additionally, the Phase I ESA did not note the presence of any RECs at the

project site or associated with any previous land use at the project site or nearby. Therefore, impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The project is located approximately three miles northwest of Susanville Municipal Airport. The project site is located outside of the airports' 65 dBA Community Noise Equivalent Level (CNEL) noise contour and outside of the airport influence area, according to the updated Lassen County Noise Element (2021) and its associated Lassen County Community Noise Levels kmz (Google Earth) file. In addition, all air traffic within the city would be subject to stringent Federal Aviation Administration (FAA) and Caltrans regulations to protect the public from potential aircraft hazards or other safety concerns such as excessive noise. Additionally, as part of the Sign Survey undertaken for the project, a preliminary filing with the FAA was submitted and the FAA returned a 'no hazard' determination for the proposed sign structure's height and location. No additional follow up with the FAA would be required unless any height or location change occurred, in which case per FAA requirements, a new filing to confirm compliance would be required. Therefore, construction or operation of the project would not result in a safety hazard or excessive noise for people residing or working in the project area and a less than significant impact would occur. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Slow-moving construction-related traffic along local roadways could reduce optimal traffic flows and could delay emergency vehicles traveling through the project area. Project construction activities could cause temporary lane closures on SR 36 and Skyline Road as the project would include a variety of offsite improvements, including installation of utility connections and junction modifications.

As mentioned in the Project Design Features section (2.3.5) in the Project Description of this Initial Study, a CMTP which defines the scope and scheduling of planned construction activities, as well as the contractor's proposed construction site management responsibilities, shall be prepared by the contractor as Project Design Feature PDF-TR-1, to ensure minimal impacts to neighboring residents and land uses and to avoid interruption of pedestrian, vehicle, and alternative transportation modes and public transit. The CMTP will facilitate communication and coordination with residents and business owners/others in the vicinity of the project site. Additionally, per California Department of Transportation (Caltrans) recommendations, large-size truck travel would be limited to off-peak commute hours to the maximum extent feasible, details of which would be outlined in the CTMP. Furthermore, Caltrans requires a permit for any heavy construction equipment and or materials that require the use of oversized transport vehicles on State highways. Should this permit be required, details would be provided within the CTMP. Finally, Caltrans District 2 – Redding is the Caltrans District with responsibility for issuing encroachment permits. Encroachment permits act as permissive authority for the permittee to enter State highway right-of-way to construct, alter, repair, improve facilities, or conduct specified activities. Any required encroachment permits would also be detailed within the CTMP. Limiting large-size truck travel to off-peak commute hours would help to ensure that emergency response vehicles would not be impeded. Any lane closures required for installation of utility connections and junction modifications would be subject to Caltrans permits and procedures, which would additionally minimize impacts to emergency response.

Goal 5, Objective 5.3 of the Lassen County Multi-Jurisdictional Hazard Mitigation Plan Update (2018) is to 'review and improve, if necessary, emergency traffic and evacuation routes; communicate such routes to the public and communities.' Additionally, a joint Lassen County and City of Susanville Emergency Operations Plan (2019) has been prepared which describes how the County and City will organize and respond to emergencies and disasters in the community and to

prevent, protect against, mitigate the effects of, respond to, and recover from the hazards and threats that pose the greatest risk to the community. Within the Emergency Operations Plan, Emergency Function (EF) 1 describes how the County and City will coordinate transportation needs during a time of a major emergency or disaster, including coordinating transportation activities to supplement the efforts of emergency response agencies to protect the public.

To prevent potentially significant construction-related traffic impacts, the project's contractor would implement a construction traffic management plan, per PDF-TR-1, prior to the initiation of any construction activities to ensure that access for all road users is maintained near the project site or impacted to the least extent feasible. Furthermore, the project would be subject to review and approval by all applicable city departments to ensure that the proposed project complies with City requirements related to emergency response. The project would be designed and maintained in accordance with applicable standards associated with vehicular access, such that interference with existing emergency response or evacuation plans would not occur. As a condition of project approval, the City of Susanville Fire and Police Departments would review the project plans to ensure that adequate emergency vehicle access is provided. Given proper design of ingress/egress driveways and compliance with applicable standards and local regulations, operation of the project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

The project would not interfere with the City/County's emergency plans and would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, as part of each of those plans is to put mechanisms in place to communicate potential impacts to emergency traffic and evacuation routes. As such, construction and operation of the project would not interfere with an adopted emergency response plan and/or emergency evacuation plan. Impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

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

The project site is vegetated but is on the edge of an urbanized area, away from wildlands and the risks of wildfire. The project site is located outside the CAL FIRE State Responsibility Area (CAL FIRE 2023) and also outside the Local Responsibility Area Very High or High Fire Hazard Severity Zone. Additionally, as shown in the Site Plan (Figure 2-3), the project would include fire hydrants, a 200,000-gallon fire water storage tank and fire booster pump to aid fire suppression. As the project site is not within a Very High or High Fire Hazard Severity Zone, the risks from wildland fires are thought to be minimal, making the risk of loss, injury, or death involving wildland fires an insignificant risk. Additionally, the project would be required to comply with all applicable fire codes and building code standards. Therefore, impacts related to wildfires would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

2.16 HYDROLOGY AND WATER QUALITY

CEQA INITIAL STUDY CHECKLIST QUESTIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
IX. Hydrology and Water Quality.				
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i) Result in substantial on- or offsite erosion or siltation;	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) Impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

2.16.1 Discussion

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Regarding surface water quality, in California, the NPDES stormwater permitting program is administered by the State Water Resources Control Board (SWRCB) through its nine Regional Water Quality Control Boards (RWQCBs). This NPDES permit, referred to as General Permit for Stormwater Discharges from Construction Activities by the SWRCB, establishes a risk-based approach to stormwater control requirements for construction projects. The City of Susanville is within the jurisdiction of the Lahontan Regional Water Quality Control Board (LRWQCB), which is responsible for the preparation and implementation of the water quality control plan for the Region 6 area, which stretches from the

California/Oregon border in the north to the San Bernadino National Forest in the south, including a large portion of the Mojave Desert within its boundary.

The Construction General Permit regulates construction activity, including clearing, grading, and excavation of areas one acre or more in size, and prohibits the discharge of materials other than stormwater, authorized non-stormwater discharges, and all discharges that contain a hazardous substance, unless a separate NPDES permit has been issued for those discharges. For all construction activities disturbing one acre of land or more, California also mandates the development and implementation of Stormwater Pollution Prevention Plans (SWPPP). The SWPPP documents the selection and implementation of BMPs to prevent discharges of water pollutants to surface or groundwater. The SWPPP also charges owners with stormwater quality management responsibilities. The developer or contractor for a construction site subject to the General Permit must prepare and implement a SWPPP that meets the requirements of the General Permit. During construction, per the NPDES Construction General Permit, the project would be required to implement a SWPPP that includes BMPs to reduce pollutants in stormwater runoff from the project site. The BMPs would adhere to the California Stormwater Quality Association BMP Handbook and would include, but not be limited to, use of sandbags, storm drain inlets protection, stabilized construction entrance, wind erosion control, and stockpile management to minimize the discharge of pollutants in stormwater during construction. All construction activities would occur in accordance with City grading permit regulations contained within the Susanville code of ordinances.

Implementation of site-specific BMPs included as part of the SWPPP and implementation of an erosion control plan that outlines erosion control measures and construction waste containment measures would ensure that waters of the United States and waters of the State are protected during and after project construction. The SWPPP would include site design measures to minimize offsite stormwater runoff that might otherwise affect surrounding habitats. The Lahontan RWQCB would review and monitor the effectiveness of the SWPPP through mandatory reporting by the city and the contractor as required. Construction of the project would not result in discharges that would violate any surface water quality standard or waste discharge requirements. Therefore, construction-related impacts on any surface water quality would be less than significant.

Regarding operation, stormwater discharge is generated by rainfall that runs off the land and impervious surfaces, such as paved streets, parking lots, and rooftops. Stormwater discharge may include pollutants of concern, which are expected to be generated by the project, that could affect stormwater quality. Fuel could be spilled while being dispensed into automobiles and trucks or during fuel deliveries, which would take place several times each day. Oils, lubricants, heavy metals, and other water quality contaminants would create residue on the paved surfaces of the project site, which would be carried in stormwater runoff and could reach surface or groundwaters. This stormwater runoff can flow directly into storm drains and continue untreated. Untreated stormwater runoff degrades water quality in surface waters and groundwater and can affect drinking water, human health, plant and animal habitats, and the water quality in off-site drainages and surface water bodies. Additionally, a leak in an underground storage tank (UST) could continue for a long period undetected, resulting in the potential contamination of groundwater.

The project SWPPP will include operational water quality BMPs that would reduce the potential for pollutant discharge. All fueling and delivery areas would be surfaced with cement concrete. Fueling bays would be covered by a canopy and would have a hydrologically isolated drainage system that discharges to an oil/water separator. The above-ground storage tanks would include a concrete containment curb which would catch and retain fuel in the event of a fuel spill.

Paved and impervious surfaces would generate stormwater runoff that would carry with it the roadway and automotive contaminants found on the pavement surface. The project would include three onsite bioretention basins that would collect surface runoff from the project site (see Figure 2-3 in Section 2, "Project Description"). Bioretention systems are designed to function in a manner similar to the physical, chemical, and biological processes in the natural environment. They capture runoff, promote infiltration and evapotranspiration, recharge groundwater, and remove up to 99 percent of the nutrients, sediment, and heavy metals carried in stormwater.

As the CUPA for jurisdictions within Lassen County, the Lassen County Environmental Health Department oversees aboveground storage tanks (AST), UST, Hazardous Waste Generators/Tiered Treatment, Hazardous Materials Management and Response Plans, and the California Accidental Release Program. The project proponent would be required to submit plans to the CUPA and obtain a valid permit prior to commencing site work. In addition, project

operations would be required to comply with Chapter 6.7 of the California Health & Safety Code and the associated regulations in Title 23 of the California Code of Regulations (Underground Storage of Hazardous Substances), the Aboveground Petroleum Storage Act and Health and Safety Code Section 25270.2.

The operation of the project would involve the use and transport of automotive fuels, lubricants, and other chemicals that could be spilled or otherwise discharged and carried to surface or groundwaters. However, the project would incorporate water quality BMPs as part of the LRWQCB-mandated SWPPP to reduce the potential for discharge and would comply with all California AST and UST regulations. As such impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The project site does not currently provide a substantial opportunity for recharge of groundwater and the project does not propose the development of long-term groundwater production wells, which would lead to decreased groundwater supplies. However, the City of Susanville's water supply comes from two natural springs, Bagwell Springs located one mile north of the city and Cady Springs located two miles west of the city, and four wells. Bagwell Springs and Cady Springs provide water supply year-round but during summer, the water system relies on the four water wells to meet peak demands (City of Susanville 2022). As there is no water main connection to the site, it is likely water will be brought in by trucks to supplement construction needs rather than constructing a well and using groundwater.

According to the project's Geotechnical Investigation Report, groundwater was encountered at depths of 18 to 20 feet during geotechnical assessment drilling. As such, given the temporary nature of construction activities, while some dewatering could be necessary during construction activities (although considered unlikely given the historic depth to groundwater), such dewatering activities would not be of an extent that would substantially alter groundwater supplies due to shallow depth of excavation and groundwater levels being considerably deeper than anticipated depths of excavation.

In addition, with development of the project, while the impervious area on the project site would increase, the potential for decreased groundwater recharge would be offset with the project's proposed bioretention basin system, whereby stormwater runoff would be directed to the bioretention basin for eventual infiltration. Thus, despite an increase in impermeable surfaces, with the bioretention basin in place, there would not be a substantial change to groundwater recharge conditions. Also, the project would include the installation of filters as part of the bioretention basin and other BMPs, which would allow for treatment of the on-site stormwater prior to contact with the groundwater below. Furthermore, the project would not include the installation of water supply wells on the project site. Water would be provided via a newly constructed water main to the site, and the City of Susanville (the water provider), has adequate water supplies for the project's operation.

Based on the above, the project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

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:

The volume and rate of stormwater runoff generated from an area is affected by development through conversion of vegetated or pervious surfaces to impervious surfaces and by the development of drainage systems that connect these impervious surfaces to streams or other water bodies. In this way, development can increase the rate of runoff

and eliminate storage and infiltration that would naturally occur along drainage paths. As water runs off the land surface, it collects and carries materials and sediment, which can be potentially harmful to downstream receiving waters. In addition, runoff from impervious surfaces can become concentrated, overwhelming existing storm drain systems, causing erosion and increasing sediment transport, downstream deposition, and flooding in lower watershed areas.

The project would comply with the NPDES Construction General Permit, which would reduce potential for erosion, siltation, and polluted runoff during construction activities. Once operational, the project site would include landscaping and hardscaping to prevent long-term erosion and bioretention basins to collect and filter polluted runoff. Although the project would create new impervious surfaces, the project is designed to decrease the volume of storm water runoff and peak discharge from the existing pre-development condition. Therefore, the project would not result in flooding or exceed the capacity of stormwater drainage systems or alter the existing drainage pattern of the site or area. Impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

i) Result in substantial on- or offsite erosion or siltation;

As described previously, vegetation removal, grading, earth moving, and excavation during project construction, including construction of the offsite utilities, could result in erosion and siltation in receiving waters. However, construction activities would comply with the NPDES General Permit, which requires preparation of a SWPPP and implementation of BMPs to control erosion and siltation. Once operational, the project site would be covered with paved surfaces and landscaped areas to provide long-term soil stability and minimize the potential for erosion. Impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

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

Construction activities have the potential to temporarily alter existing drainage patterns and flows on the project site by exposing the underlying soils, modifying flow direction, and making the project site temporarily more permeable. As discussed above, the project would implement a SWPPP that specifies BMPs and erosion control measures used during construction to manage runoff flows. These BMPs are designed to contain stormwater or construction watering on the project site such that runoff does not impact off-site drainage facilities or receiving waters. In addition, project construction activities would occur in accordance with City grading permit regulations that require necessary measures, plans, and inspections to reduce sedimentation and erosion. Thus, through compliance with all NPDES General Construction Permit requirements and compliance with applicable City regulations, construction activities for the project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. As such, construction-related impacts to hydrology would be less than significant, and no further analysis of this issue is warranted in the Draft EIR.

The project would result in a net increase of impervious surfaces, which would affect the drainage conditions of the project site. However, the project is designed to direct surface flow to bioretention basins around the perimeter of the project site. During larger storm events, the bioretention basins would overflow into an underground storm drain system composed of drain inlets and pipes that would ultimately discharge to the Susan River. As such, operation-related impacts to hydrology would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

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

As mentioned previously, the project would comply with the NPDES Construction General Permit, which would reduce potential for erosion, siltation, and polluted runoff during construction activities. Once operational, the project site would include landscaping and hardscaping to prevent long-term erosion and bioretention basins to collect and filter polluted runoff. Although the project would create new impervious surfaces, the project is designed to decrease the volume of storm water runoff and peak discharge from the existing pre-development condition. Therefore, with the incorporation of the proposed bioretention basin system and BMPs, operation of the project would not 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. Thus, project impacts would be less than significant, and no further evaluation of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

iv) Impede or redirect flood flows?

The project site is designated by the Federal Emergency Management Agency (FEMA) as Zone X - an area with a 0.2% Annual Chance Flood Hazard, areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile (FEMA 2024) and are considered moderate flood hazard areas. As described above, the proposed bioretention basins and underground storm drain system would have adequate capacity to accommodate storm water runoff from the project site, which would be stored in the basin prior to infiltration. Therefore, the project would not impede or redirect flood flows. Thus, project impacts would be less than significant, and no further evaluation of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

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

Seiches are large waves generated by ground shaking effects within enclosed bodies of water. Honey Lake is approximately 12.5 miles southeast of the project site and is too far of a distance to pose a risk from seiche. Therefore, implementation of the project would not increase the risk of seiche and no impact would occur.

Tsunamis are tidal waves generated by a significant disturbance undersea, such as a tectonic displacement of sea floor associated with large, shallow earthquakes. As the City of Susanville is landlocked and located over 175 miles from the Pacific Ocean, tsunamis are not a hazard for the city. Therefore, implementation of the Project would not increase the risk of tsunami and no impact would occur.

The Antelope Dam is the closest dam and is located 14.5 miles south of the project site, adjacent to Antelope Lake. According to the USACE's National Inventory of Dams Advanced Map Viewer (USACE 2024), the project site is not located within the downstream inundation area for Antelope Dam. However, as noted, the site is in Zone X according to FEMA maps. As described above, the proposed bioretention basins and underground storm drain system would have adequate capacity to accommodate storm water runoff from the project site, which would be stored in the basin prior to infiltration. Therefore, the project would not risk release of pollutants due to inundation. Thus, project impacts would be less than significant, and no further evaluation of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Project falls under the jurisdiction of the Lahontan RWQCB Basin Plan for the Lahontan Region. The Lahontan RWQCB is also given authority to issue waste discharge requirements, enforce actions against stormwater discharge violators, and monitor water quality. Since the construction site would be greater than one acre, the Project would be required to obtain coverage under the NPDES Construction General Permit from the Lahontan RWQCB. In accordance with the requirements of this permit, the project would implement a SWPPP that specifies BMPs and erosion control measures to be used during construction to manage runoff flows, prevent pollution, and avoid on- or off-site flooding during construction. The NPDES Construction General Permit and SWPPP measures are designed to contain and treat, as necessary, stormwater or construction watering on the project site, so runoff does not impact off-site drainage facilities or receiving waters with sediment or other pollutants. In addition, as discussed previously, the project includes bioretention systems that would collect and filter pollutants from stormwater runoff. Furthermore, the storage, use, and disposal of hazardous materials during construction and operational activities would be conducted in compliance with applicable regulations described in Section 2.8, "Hazards and Hazardous Materials." Compliance with applicable permits and regulations governing water quality would ensure that construction and operational activities would not result in exceedances of any water quality objectives established for protecting the beneficial uses of receiving water bodies (i.e. Susan River and North Lahontan Basin) or as established in the Water Quality Control Plan for the Lahontan Region (Basin Plan) or for the Susanville Hydrologic Unit which includes the Susan River Hydrologic Area.

The Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Therefore, impacts would be less than significant, and further analysis of this issue in the main body of the Draft EIR is not warranted

Significance of impact: Less than significant.

2.17 LAND USE AND PLANNING

CEQA INITIAL STUDY CHECKLIST QUESTIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
X. **Land Use and Planning.** Would the project:				
a) Physically divide an established community?	☐	☐	☒	☐
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

2.17.1 Discussion

a) Physically divide an established community?

The project site is currently undeveloped, vacant land, situated south of the City of Susanville, adjacent to SR 36. As part of the project, the project site would be annexed into the City of Susanville; thus, rather than divide a community, the project site would become part of the community. The project would also encourage alternative modes of travel by providing short-term bicycle parking spaces for the local community to use. Additionally, the project would not introduce physical barriers or change existing circulation patterns in a manner that would hinder access to existing communities. As such, the project would not physically divide an established community, the impact would be less than significant, and further analysis of this issue in the main body of the Draft EIR is not warranted.

Significance of impact: Less than significant.

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?

The Lassen County General Plan and Area Plan Land Use designation for the project site, which is within the Susanville Vicinity Area Plan area, is Industrial Park. The Industrial Park designation is for limited industrial uses to be designed and laid out as a planned development with on-site services.

The Lassen County General Plan/Area Plan for the Susanville Vicinity Area Plan area indicates principal land use designations and typical zoning districts or combinations of zoning districts which correspond to the designations. The project site has a typical corresponding zoning district of Limited Industrial District (M-L).

In addition, the City is in the process of updating its land use and zoning designations, and as part of the annexation of the project site into the City of Susanville, the land use and zoning designations would change. Commercial Shopping Center would be the proposed general plan land use designation and General Commercial Shopping District (C-2) would be the proposed zoning. As such, if the City approves the project and makes the requested General Plan and zoning changes, the project would be consistent with the City's general plan and zoning land use designations upon annexation. The County's general plan and zoning designations would no longer be operative.

As demonstrated in Table 2-3, the project would be generally consistent with the land use goals, policies, and programs in the City of Susanville General Plan. The Table also identifies consistency with the Lassen County General Plan and the Susanville Vicinity Area Plan but it should be noted that the discussion of consistency with County planning documents is for informational purposes only, as the governing General Plan will be the City's General Plan upon annexation. It should also be noted that although Table 2-3 indicates a limited number of goals and policies related to resources such as air quality, greenhouse gases/climate change, noise and cultural resources, potential conflicts with policy documents, plans and regulations related specifically to those resource areas will be assessed in the respective sections of the Draft EIR. Impacts would be less than significant and further analysis of this issue in the main body of the Draft EIR is not warranted.

Significance of impact: Less than significant.

Table 2-3 Consistency with Land Use Plans, Policies, and Regulations

Plan, Policy, or Regulation	Project Consistency
Susanville General Plan – Land Use and Community Development	
GOAL LUD-1: To promote high-quality development of a well-balanced and functional mix of land uses that preserves and enhances Susanville's quality of life.	
LUD-1.1: Land Use Compatibility. The City shall ensure compatibility between land uses to protect, maintain, and enhance the quality of life in the city by addressing traffic, noise, lighting. Height/bulk differences, and other sources of incompatibility through the use of physical separation, buffering, screening and other techniques. LUD-1.2: Design and Compatibility Standards. The City shall adopt objective design and compatibility standards to ensure that all land uses become long-term assets to the community. LUD-1.5: Commercial Land Use. The City shall designate a mix of commercial uses, including retail, general, and tourist commercial, to promote both the tourist economy and the needs of residents of Susanville.	**Consistent.** The project would be consistent with the height/bulk of other commercial developments in the area and include a setback from the Caltrans right of way. Per City of Susanville Code of Ordinances, Section 17.96.050 Lighting, the project would be designed to ensure all lighting is located so as to confine direct lighting to the premises. A light source shall not shine upon or illuminate directly on any surface other than the area required to be lighted.
GOAL LUD-3: To ensure that existing and proposed commercial development in the city is consistent with the overall character of the city	
LUD-3.2: New Commercial Development. The City shall ensure that new commercial development is appropriately located and is consistent with the Community Character Element of the General Plan. LUD-3.3: High-Quality Building Design. The City shall require distinctive and high-quality commercial building design, construction, and site planning that respects the character of Susanville. LUD-3.4: Commercial Amenities and Impact Mitigation. The City shall require new or expanded commercial or office areas to include provisions for adequate off-street parking, pathways connecting building entries to sidewalks, bicycle parking, mitigation of traffic impacts, adherence to architectural and low-water landscaping standards, and mitigation of potential land use conflicts with adjacent residential uses.	**Consistent.** The project would be annexed into the city, helping to achieve the goal of allowing appropriately located development. The building design would feature solar panels and would be designed to blend into the environment and not detract from the scenic beauty of Susanville. The project would also include adequate parking, and sidewalks, bicycle parking and a CMP to help ensure construction traffic impacts would be minimized.
GOAL LUD-5: To keep Susanville relatively compact, surrounded by open space, agriculture, and forest.	
LUD-5.1: Well-defined City Boundaries. The City shall maintain well-defined boundaries at the edge of urban development. LUD-5.2: Discourage Urban Sprawl. The City shall discourage urban sprawl. LUD-5.3: Open Space at the City Perimeter. The City shall make every effort to maintain a wide band of open space at its perimeter. LUD-5.4: 100-year Flood Plain. The City shall discourage development in the 100-year flood plain. The City shall require a Conditional Use Permit for development proposed in the 100-year flood plain, or where feasible, purchase the land. LUD-5.7: Orderly and Harmonious Development. The City shall promote the orderly and harmonious development of Susanville and its surroundings.	**Consistent.** The project would be annexed into the City of Susanville and is within the city's existing sphere of influence and would be within the city's revised city boundary. In addition, the project site represents a planned southward expansion of the city, per Figure LUD-4 in the Land Use and Community Development Element and would not constitute urban sprawl. The wide perimeter of open space to the south of the project site would be unaffected. Additionally, the project site is designated by FEMA as Zone X - an area with a 0.2% Annual Chance Flood Hazard, areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile and is considered a moderate flood hazard area.

Plan, Policy, or Regulation	Project Consistency
LUD-5.8: New Development Location. The City shall ensure that all new development takes place within the city boundaries and its sphere of influence, according to City standards	
GOAL LUD-6: To encourage annexation of lands within the City's sphere of influence that are proposed for urban development and assure logical and continuous growth.	
lud-6.3: Annexation Prior to Development. The City shall encourage annexation of areas to the city prior to their development. LUD-6.5: Expand the Sphere of Influence. The City shall seek to expand its sphere of influence southward and westward. LUD-6.6: Municipal Services Outside the City. The City shall fully use its powers to extend or withhold utilities and services and shall not extend municipal services to areas outside the city, except upon conformance to the City's General Plan and annexation to the city. LUD-6.9: Promote Open Space Outside the City. The City shall urge the County to actively promote open space, forest, and agricultural uses on lands beyond the city limits.	**Consistent.** The project would be annexed into the City of Susanville and is within the City's existing sphere of influence. In addition, the project site represents a planned southward expansion of the city. The project would provide offsite utilities that would be installed by the project applicant but have the ownership transferred to the city and in the case of the sewer line have ownership transferred to the Susanville Sanitary District. The project would have no impact on open space, forest, and agricultural uses on lands beyond the city limits.
GOAL LUD-10: To promote the orderly expansion of the City that provides additional tax base revenue and provides additional housing and services for existing and future Susanville residents	
LUD-10.4: Tribal Consultation. The City shall consult the Susanville Indian Rancheria prior to any formal application submittal of annexations.	**Consistent.** Per the requirements of AB 52, Tribal Consultation for the project will be undertaken in accordance with the requirements.
GOAL LUD-17: To ensure Susanville's long-term success and economic sustainability by diversifying and expanding tourism attractions, highlighting the unique history and character of the city	
LUD-17.5: Expand Visitor Serving Amenities. The City shall work with the Historic Susanville Uptown Association, the Lassen County Chamber of Commerce, the Susanville Indian Rancheria, and local business owners to improve and expand visitor-serving activities and facilities.	**Consistent.** The project would provide an additional visitor-serving facility with two fast-food restaurant offerings and provide a truck stop along SR 36, none of which are available between Reno and Redding.
Susanville General Plan – Circulation	
GOAL CIR-1: The City of Susanville shall work with Lassen County and the Lassen County Transportation Commission (LCTC) to develop and maintain a comprehensive, efficient, and safe transportation system to serve the needs of City residents and to stimulate Susanville's economic progress.	
CIR-1.4: Safety. Safety shall be a priority when planning and designing transportation infrastructure improvements in the City of Susanville. All improvements should include industry-accepted safety measures for intersections and roadways. CIR-1.10: Vehicle Miles Travelled (VMT). The City of Susanville shall use VMT rather than Level of Service (LOS) as the SB 375 required metric to measure transportation impacts on the environment for CEQA and other environmental factors and determinations.	**Consistent.** The project would reconfigure the SR 36/Skyline Road intersection in accordance with Caltrans/County/City requirements, ensuring safety is of paramount importance and to allow for the future western extension of Skyline Road. The project is in the process of undertaking a traffic impact assessment which will include a VMT study, which will be included as an Appendix to the Draft EIR.

Plan, Policy, or Regulation	Project Consistency
GOAL CIR-6: Include bikeway facilities in all appropriate future development projects to facilitate on-site circulation for bicycle travel, on-site bicycle parking, and connections to the proposed system	
CIR-6.3: Bicycle Facilities. Support provision of parking, shelters, and off-street facilities, where feasible and practical, to promote bicycle and pedestrian travel. Require future developments that might experience a high bicycle demand, such as commercial areas, parks, libraries, and schools, to support these facilities.	**Consistent.** The project will provide bicycle racks to encourage local bicycle travel to the site.
GOAL CIR-9: Create proper movement of goods through Susanville while minimizing the negative effects on air quality, public health, and traffic within the city	
CIR-9.2: Minimize Impacts. Balance health and quality of life priorities of the community, including air quality and noise levels, with commercial goods movement	**Consistent.** Lassen County is considered Unclassified/Attainment by NAAQS meaning the air quality in this geographic area meets or is cleaner than the national standard. However, the Air Quality analysis for the proposed project is currently ongoing; thus this issue will be analyzed in further detail in the main body of the Draft EIR. If applicable, mitigation measures to protect air quality will be included in the Air Quality section of the Draft EIR. The project is currently undertaking a noise assessment, which will determine noise levels and propose mitigation measures, should they be required. The project site is also shielded to an extent by the railroad embankment which is 5-feet above the grade of the project site. Additionally, the project would adhere to Susanville Code of Ordinances Site Development Standards for noise control.
Susanville General Plan – Community Character	
GOAL 5: Preserve and protect all bodies of water in their natural state as open space, resource, and habitat.	
GOAL 6: Maintain the integrity, natural appearance, and qualities of all bodies of water.	
GOAL 7: Assure the appropriate use of riverside lands.	
Policy I. As development and redevelopment occur, the City shall require public access to and along the Susan River from the nearest public streets and walks. Policy n. Paths along the river shall be designed to address. the safety and security of pedestrians and bicyclists.	**Consistent.** The project would be situated a considerable distance from the Susan River and would not preclude access to and along the river, should the south bank of the river be developed into an accessible path.
GOAL 11: Upgrade the quality of all development, existing and future, and assure that new development is attractive.	
Policy p. The City shall exercise greater control over growth. Policy q. The City shall promote better looking commercial and industrial developments, remodelings, and signs.	**Consistent.** The project would be a planned development, and would not be undertaken 'haphazardly', per development in the northwest of the city. The aesthetic design of the project is to blend into the surroundings through the use of predominantly neutral colors (see Figure 2-4).

Plan, Policy, or Regulation	Project Consistency
GOAL 13: Require public sidewalks on all residential and commercial streets.	
Policy s. The City will, by ordinance, require the construction of curb, gutter, and sidewalk-and handicapped ramps at corners-on all streets.	**Consistent.** The project would include a sidewalk between the SR 36 and the Skyline Road intersection.
Susanville General Plan – Open Space, Parks, Recreation, and Child Care	
GOAL 14: Promote a greater awareness of and sensitivity toward Susanville's archaeological heritage.	
Policy aj. The City shall take all possible precautions to insure that no action by the City or County results in the loss of the irreplaceable archaeological record present in the City's planning jurisdiction, and shall work with the County toward that end.	**Consistent.** The project will include a cultural resources assessment, which will be included as an Appendix to the Draft EIR. If applicable, mitigation measures to protect archeological resources will be included in the Cultural Resources section of the Draft EIR.
Susanville General Plan – Community Health, Safety, and Conservation	
GOAL 1: Protect and Improve the well-being of the Susanville community, including its residents and visitors.	
GOAL 2: Maintain the health and safety of the community.	
GOAL 3: Strive to prevent loss of life and property due to fire, crime, natural hazards, and exposure to hazardous materials.	
GOAL 5: Minimize the amount of noise that future development creates and the amount of noise to which the community Is exposed.	
Policy e. Adhere to federal or State Air Quality Standards, whichever are more stringent Policy f. Susanville's air quality shall not diminish beyond its current level during the winter. Policy g. The City shall consider the· maintenance and improvement of air quality as part of development review for new construction and/or expansion of existing uses or structures. Policy p. All construction (new, additions, and remodeling) throughout Susanville shall be designed and built to resist fire. New development shall be designed and constructed in a manner that is conducive to protecting lives and property from fire. Policy u. The City shall maintain the ability to respond to emergencies in a timely and efficient manner. Policy v. The City's street system shall be designed and upgraded to enhance vehicular and pedestrian safety and to assist the police in traffic enforcement. Policy w. The City shall increase public awareness of seismic and other natural hazards, and of methods to avoid or mitigate their effects. Policy z. In areas prone to natural hazards, the City shall only allow land uses that provide appropriate mitigation. Policy aa. The City shall avoid land uses that threaten public safety and/or that may result in property damage. Policy ad. The City shall preclude new developments fr.om compounding or impacting the potential for flooding.	**Consistent.** Lassen County is considered Unclassified/Attainment by NAAQS meaning the air quality in this geographic area meets or is cleaner than the national standard. However, the Air Quality analysis for the proposed project is currently ongoing; thus this issue will be analyzed in further detail in the main body of the Draft EIR. If applicable, mitigation measures to protect air quality will be included in the Air Quality section of the Draft EIR. As previously indicated, the project would include fire hydrants, a 200,000-gallon fire water storage tank and fire booster pump to aid fire suppression. New building construction would be built in accordance with the Susanville Code of Ordinances Standards For Fire Protection Facilities and Water Flow(Chapter 8.20). The Susanville Fire Department (SFD) is approximately 5-minutes' drive from the project site and the project would not impede SFD's ability to respond to emergencies in a timey manner. The project would provide safe access to the project site by amending the layout of the SR 36/Skyline Road intersection. A sidewalk would be included from the site to the intersection, ensuring public safety. The project has undertaken a Geotechnical Investigation Report (Reno Tahoe Geo Associates, Inc. 2022; see Appendix A) which identifies seismic and other natural hazards. Also see details of ground-related hazards in Section 2.13, Geology and Soils, of this Initial Study and Section

Plan, Policy, or Regulation	Project Consistency
Policy ak. The City shall require a hydrologic analysis of runoff and drainage from new development. Policy am. The City shall not allow placement of critical facilities and high-occupancy structures directly upon known fault lines or unstable slopes prone to ground failure during an earthquake. Policy av. The City shall preserve adequate vegetative cover and prevent development which increases erosion and sedimentation potential along streams or in unstable soil areas. Policy aw. The City shall reduce run-off induced flooding, erosion, sedimentation, and pollution resulting from new development. Policy be. Developers shall provide adequate drainage and erosion control during construction Policy bk. The City shall require landscaped sound buffers, open space, or other mitigation between residential areas and facilities or areas that produce higher noise levels, such as freeways, commercial sites, and industrial developments. Policy bq. Require acoustical studies for any new development in areas having an L_{dn} greater than acceptable for the land use proposed. Policy bs. Stipulate use of the current standard A-weighted sound levels for measuring noise. Policy bt. Require setbacks, walls, or other mitigation between noise-generating and noise-sensitive uses. Policy bu. Allow construction activities at normal activity levels, but limit them to times of the day or week when the number of persons occupying the potential noise impact zone is lowest. Policy bv. Utilize the natural shielding effects offered by topography to determine the phasing of construction. Policy bw. Require use of mufflers and require muffler maintenance on construction vehicles to meet EPA standards established under the Federal Noise Control Act of 1972 for new equipment. Policy bx. Require the placement of stationary construction equipment, such as compressors, as far as possible from developed areas, and require that acoustic shielding be used with such equipment. Policy ce. Limit the noise impact and duration of grading operations.	2.16 related to Hydrology and Water Quality, including flooding, erosion, runoff and drainage. See Figure 2-9 for details of the proposed storm drain system. The project is currently undertaking a noise assessment, which will determine noise levels and propose mitigation measures, should they be required. The project site is also shielded to an extent by the railroad embankment which is 5-feet above the grade of the project site. Additionally, the project would adhere to Susanville Code of Ordinances Site Development Standards for noise control.
Lassen County General Plan – Land Use Element	
GOAL L-4: Compatibility between land use types by providing for complementary mixtures and patterns of land uses.	
LU-7 POLICY: The County shall consider the land use compatibility implications of proposed changes in land use, including proposed general plan amendments and rezoning, to determine the significance and acceptability of the extent to which proposed changes may affect the pattern and well-being of neighboring land uses.	**Consistent.** The project site is adjacent to SR 36 and away from the main populous of the City of Susanville. As such, the project is compatible with adjacent land uses, consisting of the SR 36 highway and vacant, undeveloped land. The annexation of the project site into the City of Susanville would result in zoning and land use designation changes and the project would be consistent with the updated land use and zoning upon annexation. Without the annexation, the project would also be a permitted use.

Plan, Policy, or Regulation	Project Consistency
GOAL L-8: Neighborhoods which offer safe and pleasant living environments for the residents of Lassen County	
LU21 POLICY: The County supports the need to maintain safe and pleasant living environments and, in consideration of related land use decisions, shall require mitigation of impacts which significantly threaten such qualities.	**Consistent.** The project site is adjacent to SR 36 and away from the main populous of the City of Susanville. As such, the project is compatible with adjacent land uses, consisting of the SR 36 highway and vacant, undeveloped land. This Initial Study in conjunction with the project EIR details potential impacts and proposed mitigation measures, as applicable.
GOAL L-11: Transportation systems which complement and support the County's land use patterns.	
LU26 POLICY: When proposed projects will generate a substantial number of large trucks carrying heavy loads, the County shall require special mitigation measures to insure that those projects do not cause significant deterioration of County roads, or will otherwise mitigate such damage with adequate repair.	**Consistent.** The proposed project access would be through an extension of Skyline Road at the Skyline Road/SR 36 intersection. As such, while there would be large trucks carrying heavy loads, they would have limited impact on County roads (namely the extension of Skyline Road), as the access road would be designed to withstand the weight of trucks and would not cause serious deterioration of the newly constructed road.
GOAL L-12: Increase community wealth and the provision of needed commercial services through economic growth and diversification by sustaining and facilitating the expansion of existing commercial operations and by encouraging new commercial ventures.	
LU30 POLICY: The County shall consider, on a case-by-case basis, the need and appropriateness of specially-zoned "local convenience" and "highway commercial" sites at carefully selected points where such commercial development may be warranted, subject to the consideration and approval of an appropriate commercial land use designation and corresponding zoning district requirements. Such proposals shall demonstrate why the related local convenience or highway commercial need can not be adequately satisfied in or adjacent to existing town centers or locations which are already zoned for commercial land uses.	**Consistent**. The project site is adjacent to SR 36 and away from the main populous of the City of Susanville. As such, the project is compatible with adjacent land uses, consisting of the SR 36 highway and vacant, undeveloped land.
GOAL L-21: Minimize damage caused to and by development within areas which are subject to flooding.	
LU46 POLICY: The County shall continue to discourage inappropriate development in areas subject to flooding as indicated in the most recent and effective Flood Insurance Rate Maps adopted by the Federal Emergency Management Agency; said maps being hereby incorporated by reference into this Land Use Element.	**Consistent.** The project site is designated by FEMA as Zone X - an area with a 0.2% Annual Chance Flood Hazard, areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile and is considered a moderate flood hazard area. However, the proposed bioretention basins and underground storm drain system would have adequate capacity to accommodate storm water runoff from the project site, which would be stored in the basin prior to infiltration and thus would not exacerbate flooding.

Plan, Policy, or Regulation	Project Consistency
Lassen County General Plan – Natural Resources Element	
GOAL N-2: To protect and maximize the present and future productive, economic and environmental values of the County's soil resources.	
NR10 POLICY: The County shall exercise an appropriate degree of regulation designed to minimize soil erosion, including the administration of standards for grading and site clearance related to development projects.	**Consistent.** Soil erosion via wind would be minimized through soil stabilization measures required by Lassen County Air Pollution Control District Rule 4:18 – Fugitive Dust Emissions, such as applying asphalt, oil, water or suitable chemicals to dirt roads, material stockpiles, land clearing, excavation, grading or other surfaces which can give rise to airborne dusts. Potential for water erosion would be reduced by implementation of standard erosion control measures imposed during site preparation and grading activities. Construction activities would be carried out in accordance with applicable standard erosion control practices required pursuant to the CBC and the requirements of the NPDES General Construction Permit issued by the Lahontan RWQCB.
NR12 POLICY: The County encourages sound soil management and erosion prevention and control programs and projects, including the use of windbreaks, minimum tillage practices, grazing management, and riparian area rehabilitation	
GOAL N-3: Water supplies of sufficient quality and quantity to serve the needs of Lassen County, now and in the future.	
NR13 POLICY: The County recognizes the critical importance and future value of its water resources and shall support the conservation of water supplies and protection of water quality.	**Consistent.** With the implementation of site-specific BMPs included as part of the SWPPP and implementation of an erosion control plan that outlines erosion control measures and construction waste containment measures to ensure that waters of the United States and waters of the State are protected during and after project construction. The operation of the project would involve the use and transport of automotive fuels, lubricants, and other chemicals that could be spilled or otherwise discharged and carried to surface or groundwaters. However, the project would incorporate water quality BMPs as part of the LRWQCB mandated SWPPP to reduce the potential for discharge and would comply with all California AST and UST regulations.
GOAL N-7: To maintain diverse and healthy vegetation communities in order to sustain natural and economic benefits, including watershed, soil stabilization, wildlife, fisheries, timberland, grazing and scenic values	
NR26 POLICY: In order to avoid or reduce the extent of potential adverse impact to important vegetation communities which may result from projects and land use decisions within its jurisdiction, the County shall consider the potential extent of such impacts in the course of project review.	**Potentially Consistent.** The site is very disturbed and covered with invasive plant species. The site is completely invaded with perennial pepperweed (*Lepidium latifolium*) and cheatgrass (*Bromus tectorum*) as well as some Medusa head (*Elymus caput-medusae*). There is the potential for Carson wandering skipper as the host plant for the species is common across the project site. This topic will be further analyzed within the project's EIR and appropriate mitigation measures will be implemented to reduce impacts.

Plan, Policy, or Regulation	Project Consistency
GOAL N-8: Protection of rare and endangered plant species balanced with the need to sustain productive, multiple land uses when possible.	
NR28 POLICY: The County recognizes the need to identify and provide reasonable measures for the protection of rare and endangered plant species in the consideration of projects and land use decisions.	**Potentially Consistent.** The site is very disturbed and covered with invasive plant species. The site is completely invaded with perennial pepperweed (*Lepidium latifolium*) and cheatgrass (*Bromus tectorum*) as well as some Medusa head (*Elymus caput-medusae*). There is the potential for Carson wandering skipper as the host plant for the species is common across the project site. This topic will be further analyzed within the project's EIR and, if required, appropriate mitigation measures will be implemented to reduce impacts
GOAL N-9: Control invasive weeds and plant species	
NR29 POLICY: The County supports strong measures to eliminate or prevent the spread of invasive and noxious weeds and plant species including, but not limited to, medusahead, yellow starthistle, and perennial pepperweed (whitetop), and to control the adverse effects from the excessive spreading of such species as juniper and cheatgrass.	**Potentially Consistent.** The site is very disturbed and covered with invasive plant species. The site is completely invaded with perennial pepperweed (*Lepidium latifolium*) and cheatgrass (*Bromus tectorum)* as well as some Medusa head (*Elymus caput-medusae*). As such, measures to control the spread of invasive species will be discussed with the City of Susanville/Lassen County prior to construction. It is likely that biosecurity protocols will need to be put in place during construction to prevent spreading of invasive species (such as washing down construction equipment prior to it being removed offsite) and development of an invasive species control plan. Further details will be provided in the Draft EIR.
GOAL N-22: Air quality of high standards to safeguard public health, visual quality, and the reputation of Lassen County as an area of exceptional air quality	
NR74 POLICY: The Board of Supervisors will continue to consider, adopt and enforce feasible air quality standards which protect the quality of the County's air resources.	**Consistent.** The project's air quality emissions will be assessed in accordance with Lassen County APCD recommended methodologies and compliance with applicable emissions standards, which will be set out in the Project's Draft EIR.
GOAL N-23: Scenic resources of high quality which will continue to be enjoyed by residents and visitors and which will continue to be an asset to the reputation and economic resources of Lassen County	
NR78 POLICY: The County has identified areas of scenic importance and sensitivity along state highways and major County roads and has designated those areas as "Scenic Corridors." (Refer to the General Plan land use map and related designations in various area plans, which may also be regarded as "scenic highway corridors.") The County will develop and enforce policies and regulations to protect areas designated as scenic corridors from unjustified levels of visual deterioration	**Consistent.** As noted within the general plan, there are no State Scenic Highways designated by the State of California in Lassen County and also no official County Scenic Highways, as recognized by the state.
GOAL N-24: Protection of the scenic qualities of the county's night sky	
NR81 POLICY: The County shall maintain and enforce policies, development standards and mitigation measures to control lighting generated by development and to minimize the unnecessary adverse impacts of such lighting in the vicinity of the development and on the general scenic qualities of the night sky in the area.	**Consistent.** The project would be built in accordance with City of Susanville Code of Ordinances, Section 17.96.050 Lighting, and applicable Backlight-Uplight-Glare (BUG) standards established by the Illuminating Engineering Society of North America (IESNA) would also be adhered to as well as CALGreen code requirements related to light pollution reduction (see Chapter 5, Section 5.106.8). Compliance with these existing regulations and

Plan, Policy, or Regulation	Project Consistency
	standards would ensure that light levels at property lines would not create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area.
NR82 POLICY: The County will encourage projects within Lassen County but outside the County's jurisdictional authority to include provisions to minimize the adverse intrusion of lighting on the surrounding area and the night sky in general.	
Lassen County General Plan – Agriculture Element	
GOAL A-1: Conservation of productive agricultural lands and lands having substantial physical potential for productive agricultural use, and the protection of such lands from unwarranted intrusion of incompatible land uses and conversion to uses which may obstruct or constrain agricultural use and value.	
AG-5 POLICY: In order to minimize the disruption and displacement of agricultural operations and lands by non-agricultural development, non-agricultural development in agricultural areas should be directed to: sites where soils do not have-significant potential for productive agricultural use; sites least likely to impact productive agricultural uses in the vicinity; sites where, or which are adjacent to where, similar non-agricultural uses already exist; and sites where adequate community services are or will be available.	**Consistent.** The project site is not zoned for agriculture and the remainder of the parcel not being used for project development could be used for agricultural operations.
Lassen County General Plan – Wildlife Element	
GOAL W-1: To protect and enhance the overall health of wildlife habitats and special resource areas to maintain healthy, abundant and diverse wildlife populations.	
WE-2 POLICY: The County supports the cooperative identification of "areas of significant wildlife value" or similar designations for areas where it is demonstrated by sound biological science that the habitat values are of significant importance to the health and/or survival of one or more species of wildlife. The County may apply a special designation to these areas, and/or agree to support specific resource management objectives, policies and voluntary programs to protect wildlife resources within these areas.	**Consistent.** The site is very disturbed and covered with invasive plant species. The site is completely invaded with perennial pepperweed (*Lepidium latifolium*) and cheatgrass (*Bromus tectorum*) as well as some Medusa head (*Elymus caput-medusae*). There is the potential for Carson wandering skipper as the host plant for the species is common across the project site. This topic will be further analyzed within the project's EIR.
WE-4 POLICY: The County recognizes that some areas which are designated and zoned for development, including but not limited to rural residential lands and areas indicated for planned development, may also have wildlife resource and open space values which need to be addressed and considered for protection. The County will address the need for protection of wildlife resources and open space values in areas which are zoned for development during the review of development proposals.	**Consistent.** As noted in the Project Description, the project site is located on an approximate 14.15-acre vacant parcel but is part of a larger 79.6-acre parcel (APN 107-280-017), meaning that should wildlife use the site as a migratory wildlife corridor or wildlife nursery site, they would still be able to move in the remaining 80 percent of the overall parcel. That said, the presence of several barbed wire livestock fences from past use as pastureland would likely be a substantial imposition to wildlife using the site as a wildlife corridor, especially as the site is bounded to the east by a busy highway (SR 36).
WE-5 POLICY: Prior to the imposition of substantial wildlife-related mitigation measures by the County, the County shall review evidence demonstrating that the proposed action or project could otherwise	**Consistent.** This Initial Study in conjunction with the project EIR details potential impacts and proposed mitigation measures, as applicable.

Plan, Policy, or Regulation	Project Consistency
have potentially significant adverse impacts to wildlife and that the proposed measures will, in fact, help accomplish practical and necessary mitigation objectives.	
GOAL W-4: Protect and enhance the wildlife habitat of riparian areas and wetlands.	
WE16 POLICY: The County supports interagency efforts to protect and restore the wildlife habitat values of lakes, riverine and riparian areas and wetlands.	**Consistent.** According to the National Wetlands Inventory Mapper, there are no riparian wetland or sensitive natural community areas located within or immediately adjacent the project site. The potential closest mapped feature is the Susan River and associated forested/shrub wetland habitat located (at the closest point), approximately 400 feet northeast from the project site. The site is predominantly flat, sloping towards the southeast at an average gradient of 0.5 percent. While there are wetlands in the vicinity of the project site to the north, these are of sufficient distance from proposed project developments to not be impacted. Additionally with a gradual slope to the southeast, this is away from the riparian areas identified.
Lassen County General Plan – Open Space Element	
GOAL 0-6: To support the protection of the public from natural hazards and from threats to health and safety which could result from damage to or contamination of public resources.	
OS19 POLICY: The County shall consider documented evidence of geologic hazards, including but not limited to Alquist-Priolo Earthquake Fault Zones, in review of proposed development projects or proposed land use designations and zoning which would facilitate residential and community development, and shall determine how the safety of the public may be advanced by the use of open space provisions relative to those hazards.	**Consistent**. The Geotechnical Investigation Report notes the USGS Quaternary Faults map shows unnamed fault segments of the Susanville – Eagle Lake area approximately 1.5-miles west of the site. These Class A faults have undergone undifferentiated Quaternary movement with unspecified movement intervals. The Geotechnical Investigation Report notes no active faulting has been mapped beneath the project site.
OS20 POLICY: The County shall continue to make protection from fire hazards a consideration in planning, land use and zoning decisions, environmental review, and project review with special concern for areas of "high" and "extreme" fire hazard.	**Consistent.** The project site is vegetated but is on the edge of an urbanized area, away from wildlands and the risks of wildfire. The project site is located outside the CAL FIRE State Responsibility Area and also outside the Local Responsibility Area Very High or High Fire Hazard Severity Zone.
OS22 POLICY: The County shall discourage development in areas subject to flooding as indicated in the most recent and effective Flood Insurance Rate Maps adopted by the Federal Emergency Management Agency; said maps being hereby incorporated by reference into this Land Use Element.	**Consistent.** The project site is designated by FEMA as Zone X - an area with a 0.2% Annual Chance Flood Hazard, areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile and is considered a moderate flood hazard area. However, the proposed bioretention basins and underground storm drain system would have adequate capacity to accommodate storm water runoff from the project site, which would be stored in the basin prior to infiltration and thus would not exacerbate flooding.
OS24 POLICY: In consideration of proposed development within areas subject to flooding, the County shall encourage the use of sites outside of the flood prone areas when such alternatives exist and options are feasible.	

Plan, Policy, or Regulation	Project Consistency
OS27 POLICY: The County recognizes that its surface and ground water resources are especially valuable resources which deserve and are in need of appropriate measures to protect their quality and quantity.	**Consistent.** With the implementation of site-specific BMPs included as part of the SWPPP and implementation of an erosion control plan that outlines erosion control measures and construction waste containment measures to ensure that waters of the United States and waters of the State are protected during and after project construction. The operation of the project would involve the use and transport of automotive fuels, lubricants, and other chemicals that could be spilled or otherwise discharged and carried to surface or groundwaters. However, the project would incorporate water quality BMPs as part of the LRWQCB mandated SWPPP to reduce the potential for discharge and would comply with all California AST and UST regulations.
Lassen County General Plan – Circulation Element	
GOAL C-1: A comprehensive, efficient and safe transportation system to serve the needs of County ·residents and to stimulate the economic progress of the County.	
CE10 POLICY: In consideration of proposed projects which would generate a substantial number of large trucks carrying heavy loads, the County shall require special mitigation measures to insure that those projects do not cause, or will adequately mitigate, significant deterioration of County roads.	**Consistent.** The proposed project access would be through an extension of Skyline Road at the Skyline Road/SR 36 intersection. As such, while there would be large trucks carrying heavy loads, they would have limited impact on County roads (namely the extension of Skyline Road), as the access road would be designed to withstand the weight of trucks and would not cause serious deterioration of the newly constructed road.
GOAL C-6: Expanded development and use of bicycle paths and pedestrian ways to reduce dependence upon automobiles.	
CE26 POLICY: The County supports development and maintenance of safe and efficient alternative transportation routes that promote non-motorized forms of transportation for residents of more densely populated areas of the county to travel between home, work, businesses and schools through the planning, acquisition, development and management of trails in the public right-of-way.	**Consistent.** The proposed project would include bicycle parking racks and a sidewalk from the site access road to SR 36 for potential connection to a future sidewalk along SR 36 to the City of Susanville.
Susanville Vicinity Area Plan	
Policy 3.1 The County shall protect noise sensitive land uses from existing or future noise generators by locating them within compatible noise environments or by requiring noise mitigation measures.	**Consistent.** The project would introduce a new source of noise during construction through heavy construction equipment (e.g., bulldozers, backhoes, cranes, loaders, etc.) that would generate noise on a short-term basis. During operation, large semi-trailer trucks would frequent the site to refuel and stay overnight. However, there are limited receptors in the vicinity of the project site and no identified sensitive receptors such as schools, day care centers, senior living communities, hospitals, etc. With the site being adjacent to SR 36 and away from the main populous of the City of Susanville, the project is sited within a compatible noise environment.
Policy 7.1C Non-agricultural uses shall be directed to areas with soils with limited value for intensive agricultural use or in areas where similar uses already exist. Non-agricultural uses shall not interfere with agricultural operations.	**Consistent.** The project site is not zoned for agriculture and the remainder of the parcel not being used for project development could be used for agricultural operations.

Plan, Policy, or Regulation	Project Consistency
Policy 10.1 The County shall preserve and protect the cultural resources of the planning area.	**Consistent.** The project would adhere to all laws and regulations regarding preservation and protection of cultural resources. Additionally, this topic will be further analyzed within the project's EIR.
Policy 11.1A Lassen County shall conserve and enhance the wildlife and fisheries of the area and preserve and restore the ecological, recreational and aesthetic benefits of the Susan River and its tributaries.	**Potentially Consistent.** The site is very disturbed and covered with invasive plant species. The site is completely invaded with perennial pepperweed (Lepidium latifolium) and cheatgrass (Bromus tectorum) as well as some Medusa head (Elymus caput-medusae). There is the potential for Carson wandering skipper as the host plant for the species is common across the project site. This topic will be further analyzed within the project's EIR and appropriate mitigation measures will be implemented to reduce impacts.
Policy 18.1 Lassen County shall designate enough land for commercial use to meet existing and future needs of the area's population. However, new commercial uses shall not adversely affect present or future efforts to revitalize Susanville's downtown area.	**Consistent.** The project site is adjacent to SR 36 and away from the main populous of the City of Susanville. As such, the development of the site would not adversely affect present or future efforts to revitalize Susanville's downtown area.

2.18 MINERAL RESOURCES

CEQA INITIAL STUDY CHECKLIST QUESTIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XI. Mineral Resources.				
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☒	☐

2.18.1 Discussion

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?

Minerals are defined as any naturally occurring chemical elements or compounds formed from inorganic processes and organic substances. The California Surface Mining and Reclamation Act of 1975 requires that all cities and counties address significant mineral resources, classified by the State Geologist and designated by the State Mining and Geology Board, in their General Plans. Mineral resources could include oil wells, natural gas wells, and mineral deposits, among others.

According to the Lassen County General Plan, in 1860, a rhyolite tuff quarry was developed at the west end of Susanville, which was used extensively in the construction of Susanville's business district. Additionally, Clay deposits in the Honey Lake Valley were first discovered in 1876 and brick kiln operations operated on an occasional basis for the next forty years.

Per California's Surface Mining and Reclamation Act of 1975 (SMARA), the State Geologist conducted a Mineral Land Classification study of naturally occurring pozzolan in the Long Valley area of southeastern Lassen County, concluding that an area encompassing 5 acres was classified MRZ-2a (CGS 2003). MRZ-2a areas are underlain by mineral deposits for which geologic information indicates that significant measured or indicated resources are present. Approximately 1.1 billion tons of pozzolan resources contained in an area of roughly 8.6 square miles was classified as MRZ-2b. MRZ-2b areas are underlain by mineral deposits for which geologic information indicates that significant inferred resources are present. Resources were calculated to a maximum depth of 100 feet. However, the study area assessed by the State geologist is along the SR 395 corridor between approximately 47 and 57 miles southeast of the project site and is centered approximately on Hallelujah junction, extending to the southern border of Lassen County and north to the SR 395 / North Red Rock Road junction. Due to the intervening distance and the absence of any mineral resources identified on project site, impacts would be less than significant and further analysis of this issue in the main body of the Draft EIR is not warranted.

Significance of impact: Less than significant.

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?

As defined above, while minerals are defined as any naturally occurring chemical elements or compounds formed from inorganic processes and organic substances, mineral resources could include oil wells, natural gas wells, and mineral deposits, among others. There are no known mineral resources in the vicinity of the project site and the site is not classed as a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. In addition, according to the DOC Geologic Energy Management Division (CalGEM) Well Finder Map, there are no wells on the project site, although there is one Geothermal Well associated with Sierra Pacific Industries approximately 0.5 miles to the northwest (CalGEM 2024).

The site is not currently used for mineral extraction and the project would not create a loss of availability of a locally important mineral resource as none are present. Thus, the impacts associated with the proposed Project would be less than significant and further analysis of this issue in the main body of the Draft EIR is not warranted.

Significance of impact: Less than significant.

2.19 NOISE

CEQA INITIAL STUDY CHECKLIST QUESTIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XII. Noise.				
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☒	☐	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

2.19.1 Discussion

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 in other applicable local, state, or federal standards?

The area surrounding the project site is predominately rural, with commercial uses to the north beyond the Susan River, SR 36 and pastureland to the east, several residential dwellings to the south, with pastureland beyond and pastureland with a timber mill to the west. Construction of the project would require the use of heavy construction equipment (e.g., bulldozers, backhoes, cranes, loaders, etc.) that would generate noise on a short-term basis. Therefore, construction of the project could generate a temporary increase in ambient noise levels in excess of applicable standards for nearby sensitive receptors. In addition, operational activities, including on-site mechanical heating, ventilation, and air conditioning (HVAC) systems and loading, refuse collection and traffic would generate noise. Therefore, further analysis on this environmental issue will be included in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

b) Generation of excessive groundborne vibration or groundborne noise levels?

The project would include construction and operational activities, which could generate temporary and permanent groundborne noise and vibration. Therefore, these issues will be analyzed further in the main body of the Draft EIR.

Significance of impact: Potentially significant 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?

The project is located approximately three miles northwest of Susanville Municipal Airport. The project site is located outside of the airports' 65 dBA CNEL noise contour and outside of the airport influence area, according to the updated Lassen County Noise Element (2021) and its associated Lassen County Community Noise Levels kmz (Google Earth) file. Therefore, construction or operation of the project would not expose people to excessive airport related noise levels and no impact would occur. No further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: No impact.

2.20 POPULATION AND HOUSING

CEQA INITIAL STUDY CHECKLIST QUESTIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XIII. Population and Housing.				
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

2.20.1 Discussion

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)?

Upon annexation, which would occur prior to any construction or operation, the project would be a permitted land use within the land use and zoning designation for the project site. Although a 10-space RV park is proposed, occupancy would be limited to short-term stays and would not constitute permanent housing as the project does not include the construction of new homes. Typically, the average stay for a semi-truck driver would be 30 minutes to fuel or 8 hours if overnighting and the average stay for RV owners is exactly one night. Gas customers average 7-12 minutes per stop. The project would include various services and amenities, such as a convenience store, fast-food restaurant, and recreational facilities; however, these services and amenities are primarily intended to serve thru-motorists on SR 36, though local residents could use them as well.

The project would generate temporary construction jobs and long-term employment opportunities associated with the proposed fuel station, convenience store, and fast-food restaurant. It is expected that these jobs would be sourced from the local workforce and would not require people to relocate from surrounding communities. Therefore, the project is not expected to contribute to direct unplanned growth in the City of Susanville.

The project would not include the development of infrastructure that would attract additional development in the surrounding area. While offsite utilities would need to be brought to the site, these would be intended to serve the proposed project only. Any new development in the project vicinity would need to be conducted in accordance with Lassen County General Plan policies and City of Susanville Area Plan and land use and zoning designations, or with City General Plan policies for projects seeking annexation into the City. Therefore, the project is not expected to contribute to indirect unplanned growth in the City of Susanville.

Based on the above discussion, the project would not induce substantial unplanned population growth in the area, either directly or indirectly. This impact would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The project includes construction of a full-service travel center on vacant land within a largely undeveloped area and would include construction of offsite utilities. There are no existing residences within the project site or along the offsite utilities' alignment. The nearest residential dwellings would be approximately 600 ft from the travel stop to the southwest, located on Sierra Road and Marin Street. However, the construction of the project would not directly impact those residential dwellings due to the distance from construction limits to the properties. Nor, due to the distance between the project site and these residential dwellings, would operation of the project displace any existing residents or housing units, necessitating the construction of replacement housing elsewhere. Therefore, impacts would be less than significant and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

2.21 PUBLIC SERVICES

CEQA INITIAL STUDY CHECKLIST QUESTIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XIV. Public Services.				
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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?	☐	☐	☒	☐

2.21.1 Discussion

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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?

The project site is within the Susanville Fire Department (SFD) service area. The project would be designed and operated according to applicable requirements of the California Fire Code, and California Health and Safety Code. The project design would be subject to review and approval by the fire prevention and public safety bureau, who provides project review services for all new development projects. The bureau was established to provide encouragement for fire and public safety and to enforce local, state and federal requirements and laws relating to public safety as identified by the State Fire Marshal, fire prevention, and fire.

As discussed previously, the proposed project would not add new residential units or increase the residential population within the city. The project would add a new commercial development with multiple structures and use of flammable materials, and providing services and amenities that could accommodate up to 141 vehicles at any one time (70 trucks, 15 RVs, 56 automobiles). Overnight truck and RV parking would be limited to short-term stays. Typically, the average stay for a semi-truck driver would be 30 minutes to fuel or 8 hours if overnighting and the average stay for RV owners is exactly one night. Gas customers average 7-12 minutes per stop. The periodic increase in visitors to the project site would constitute an increase in the service population and could lead to a greater demand for fire prevention, medical assistance, or emergency response. However, this demand would not substantially affect SFD's existing service ratios or response times as the project site is flat and located approximately five minutes' drive from the SFD's station at 1505 Main St, Susanville, thus should a fire break out, it should not be

uncontrollable as SFD should be able to respond in a timely manner. Additionally, the California Department of Forestry and Fire Protection (CalFire) has a station on Highway 36 near Prattville Road to the north, the Susan River Fire Protection District has a facility to the south near Johnstonville and the California Department of Corrections and Rehabilitation also has a fire station to the northeast. In the event of a fire, the Susanville Interagency Dispatch Center dispatches the SFD, CalFire, the Susan River Fire Protection District and the California Department of Corrections and Rehabilitation Fire teams (Lassen County Times 2024). These stations therefore could provide firefighting capabilities in the event SFD was occupied elsewhere. Therefore, project implementation would not result in an increased need for SFD services or facilities in order to adequately respond to fire and medical emergencies.

In addition, the city's Public Safety Fire Fund is funded from general fund transfer, but also through grants and other programs. Operational sales tax revenue generated by the project would help fund existing and future fire protection needs. Therefore, the project would not create a unique demand on fire protection resources and would not interfere with existing services.

Based on the above discussion, the project would not result in the need for new or expanded fire service facilities. Impacts related to fire protection would be considered less than significant and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

Police protection?

The project site is within the Susanville Police Department (SPD) service area. The project would be designed to meet applicable safety standards, including proper site distances at new intersections, adequate site access for law enforcement personnel, and the use of security lighting throughout the project site.

As discussed previously, the proposed project would not add new residential units or increase the residential population within the city. The project would add a new commercial development with multiple structures, providing services and amenities that could accommodate up to 141 vehicles at any one time (70 trucks, 15 RVs, 56 automobiles). Overnight truck and RV parking would be limited to short-term stays. Typically, the average stay for a semi-truck driver would be 30 minutes to fuel or 8 hours if overnighting and the average stay for RV owners is exactly one night. Gas customers average 7-12 minutes per stop. The periodic increase in visitors to the project site would constitute an increase in the service population and could lead to a greater demand for police services, including monitoring for potential traffic violations, disturbances, or safety concerns in the area. As such, SPD may need additional resources or personnel to manage the influx of new people coming to the area. As the service population increases, the department might need to adjust staffing, patrol schedules, or specialized units (such as commercial traffic enforcement). A higher volume of visitors may also result in more calls for service, impacting response times and possibly requiring additional funding or training. However, the project would not substantially affect SPD's existing service ratios or response times as the project site is located approximately five minutes' drive from the SPD's station at 1801 Main St, Susanville, thus should an emergency need police assistance, SPD should be able to respond in a timely manner. In addition, in the event of an emergency, Lassen County Dispatch send California Highway Patrol (who have a facility off the SR 36 / 395 intersection in Johnstonville), Lassen County Sheriff's Office (off Sheriff Cady Lane in Susanville), and Cal Fire to events (Sierra Daily News 2024) Therefore, project implementation would not result in an increased need for SPD services or facilities in order to adequately respond to police emergencies.

In addition, the city's Public Safety Police Fund is funded from general fund transfer, but also through grants and other programs. Operational sales tax revenue generated by the project would help fund existing and future police protection needs. Therefore, the project would not create a unique demand on police protection resources and would not interfere with existing services.

The project would not generate substantial new vehicle trips on SR 36, rather, the project would predominately result in the diversion of existing trips on SR 36 because the project is intended to provide amenities and rest areas for thru-motorists. Therefore, the project is not anticipated to substantially increase demand for California Highway Patrol (CHP) services or affect existing CHP service ratios or response times.

Based on the above discussion, the project would not result in the need for new or expanded police protection facilities. Impacts related to police protection would be considered less than significant and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

Schools?

The project includes the construction of a full-service travel stop on vacant land adjacent to SR 36 in the City of Susanville. The project would serve local residents and travelers on SR 36 passing through the city. The project would not include new residential land uses and would not contribute to direct population growth in the city. Temporary construction jobs and long-term employment opportunities at the proposed travel stop facilities would be sourced from the local workforce and would not require people to relocate from surrounding communities. Therefore, the project is not expected to increase enrollment at nearby schools or affect performance objectives, such as teacher to student ratios, that would require the construction of new or expanded schools. Furthermore, operational sales tax revenue generated by the project would help fund future public facilities. As such impacts would be less than significant and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

Parks?

As discussed above, the project would not include new residential land uses and would not contribute to direct population growth in the City of Susanville, although there would be an increase in the number of overnight visitors. The nearest park is Riverside Park, 1.1 miles as the crow flies, but 1.9 miles via SR 36, Riverside Drive and Limoneria Avenue or 2-miles via the abandoned railroad tracks and Alexander Avenue. Therefore, the project is not expected to increase the use of existing nearby parks and recreational facilities. Furthermore, operational sales tax revenue generated by the project would help fund future public facilities. The project would include a dog park but it is unlikely that local residents would travel to the travel stop to use the dog park specifically. As such impacts would be less than significant and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

Other public facilities?

As discussed above, the project would not contribute to residential population growth within the City of Susanville. Therefore, the project is not expected to increase the use of existing nearby public facilities, such as libraries. Furthermore, operational sales tax revenue generated by the project would help fund future public facilities. As such impacts would be less than significant and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

2.22 RECREATION

CEQA CHEKLIST ENVIRONMENTAL QUESTIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XV. Recreation. Would the project:				
a) 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) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒	☐

2.22.1 Discussion

a) 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?

As discussed under Section 2.14, the project would not include new residential land uses and would not contribute to direct population growth in the City of Susanville. Overnight truck and RV parking would be limited to short-term stays. Typically, the average stay for a semi-truck driver would be 30 minutes to fuel or 8 hours if overnighting and the average stay for RV owners is exactly one night. Gas customers average 7-12 minutes per stop. The periodic increase in visitors to the project site would not constitute an increase in the service population, especially as most visitors will be thru-motorists. Therefore, the project is not expected to 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. Furthermore, operational sales tax revenue generated by the project would help fund future public facilities. The project would include a dog park but it is unlikely that local residents would travel to the travel stop to use the dog park specifically. As such impacts would be less than significant and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

As discussed under Section 2.14, the project would not include new residential land uses and would not contribute to direct population growth in the City of Susanville. Overnight truck and RV parking would be limited to short-term stays. Typically, the average stay for a semi-truck driver would be 30 minutes to fuel or 8 hours if overnighting and the average stay for RV owners is exactly one night. Gas customers average 7-12 minutes per stop. The periodic increase in visitors to the project site would not constitute an increase in the service population, especially as most visitors will be thru-motorists. The project would include a dog park, but it is unlikely that local residents would travel to the travel stop to use the dog park specifically; rather, the dog park would be used for temporary canine relief. No other recreational facilities are proposed. Therefore, the project is not expected to require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. Furthermore, operational sales tax revenue generated by the project would help fund future public facilities. As such impacts would be less than significant and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

2.23 TRANSPORTATION

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

2.23.1 Discussion

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

The project would not alter or conflict with any existing or planned transit facilities or conflict with the general plan policy or program as there are no existing, planned, or programmed transit services or facilities in the immediate vicinity of the project site. The project would include internal pathways and circulation for pedestrians navigating the project site. However, as the transportation impact assessment is currently ongoing, this potential impact will be analyzed in greater detail in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

As the project site is within one-half mile of an existing major transit stop, per CEQA Guidelines Section 15064.3, the project should be presumed to cause a less than significant transportation impact. However, as the transportation impact assessment is currently ongoing, this potential impact will be analyzed in greater detail in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project would be required to comply with city safety standards during construction of on- and off-site improvements. Additionally, the project is subject to review by city staff to ensure appropriate traffic handling during construction, and that design standards are met to minimize any potential hazards related to the transportation circulation network.

Construction traffic impacts would be localized and temporary; however, during construction of the project, traffic operations could be degraded. For this reason, the project would be required to follow all local and Caltrans protocols to ensure safety to travelers and minimize traffic disturbance during construction activities. As mentioned in

the Project Design Features section (2.3.5) in the Project Description of this Initial Study, a CMTP which defines the scope and scheduling of planned construction activities, as well as the contractor's proposed construction site management responsibilities, shall be prepared by the contractor as Project Design Feature PDF-TR-1, to ensure minimal impacts to neighboring residents and land uses and to avoid interruption of pedestrian, vehicle, and alternative transportation modes and public transit.

During operation, the project would not include design features, such as sharp curves or dangerous intersections, or incompatible uses that would result in traffic safety hazards. Ingress and egress movements for the project would be facilitated via the segregated driveway entrances, one for trucks and one for automobiles and RVs, which would have adequate sight-lines to the SR 36/Skyline Road intersection. Access to the project site would be required to comply with all city design standards, which would ensure adequate design and construction of proposed improvements. Therefore, implementation of the project would result in less than significant impacts and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

d) Result in inadequate emergency access?

Slow-moving construction-related traffic along local roadways could reduce optimal traffic flows and could delay emergency vehicles traveling through the project area. Project construction activities could cause temporary lane closures on SR 36 and Skyline Road as the project would include a variety of offsite improvements, including installation of utility connections and junction modifications.

As mentioned in the Project Design Features section (2.3.5) in the Project Description of this Initial Study, a CMTP which defines the scope and scheduling of planned construction activities, as well as the contractor's proposed construction site management responsibilities, shall be prepared by the contractor as Project Design Feature PDF-TR-1, to ensure minimal impacts to neighboring residents and land uses and to avoid interruption of pedestrian, vehicle, and alternative transportation modes and public transit. The CMTP will facilitate communication and coordination with residents and business owners/others in the vicinity of the project site. In addition, per California Department of Transportation (Caltrans) recommendations, large-size construction truck travel would be limited to off-peak commute hours to the maximum extent feasible, details of which would be outlined in the CTMP. Furthermore, Caltrans requires a permit for any heavy construction equipment and or materials that require the use of oversized transport vehicles on State highways. Should this permit be required, details would be provided within the CTMP. Finally, Caltrans District 2 – Redding is the Caltrans District with responsibility for issuing encroachment permits. Encroachment permits act as permissive authority for the permittee to enter State highway right-of-way to construct, alter, repair, improve facilities, or conduct specified activities. Any required encroachment permits would also be detailed within the CTMP. Through limiting large-size truck travel to off-peak commute hours would help to ensure that emergency response vehicles would not be impeded. Any lane closures required for installation of utility connections and junction modifications would be subject to Caltrans permits and procedures which would additionally minimize impacts to emergency response.

Goal 5, Objective 5.3 of the Lassen County Multi-Jurisdictional Hazard Mitigation Plan Update (2018) is to 'review and improve, if necessary, emergency traffic and evacuation routes; communicate such routes to the public and communities.' Additionally, a joint Lassen County and City of Susanville Emergency Operations Plan (2019) has been prepared which describes how the County and City will organize and respond to emergencies and disasters in the community and to prevent, protect against, mitigate the effects of, respond to, and recover from the hazards and threats that pose the greatest risk to the community. Within the Emergency Operations Plan, Emergency Function (EF) 1 describes how the County and City will coordinate transportation needs during a time of a major emergency or disaster, including coordinating transportation activities to supplement the efforts of emergency response agencies to protect the public.

To prevent potentially significant construction-related traffic impacts, the project's contractor would implement a construction traffic management plan, per PDF-TR-1, prior to the initiation of any construction activities to ensure that access for all road users is maintained near the project site or impacted to the least extent feasible. Furthermore, the

project would be subject to review and approval by all applicable city departments to ensure that the proposed project complies with City requirements related to emergency response. The project would be designed and maintained in accordance with applicable standards associated with vehicular access, such that interference with existing emergency response or evacuation plans would not occur. As a condition of project approval, the City of Susanville Fire and Police Departments would review the project plans to ensure that adequate emergency vehicle access is provided. Given proper design of ingress/egress driveways and compliance with applicable standards and local regulations, operation of the project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

The project would not interfere with the City/County's emergency plans and would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, as part of each of those plans is to put mechanisms in place to communicate potential impacts to emergency traffic and evacuation routes. As such, construction and operation of the project would not interfere with an adopted emergency response plan and/or emergency evacuation plan. Impacts would be less than significant, and no further analysis of this issue is warranted in the Draft EIR.

Significance of impact: Less than significant.

2.24 TRIBAL CULTURAL RESOURCES

CEQA ENVIRONMENTAL CHECKLIST QUESTIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XVII. Tribal Cultural Resources.				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
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)?	☒	☐	☐	☐
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?	☒	☐	☐	☐

2.24.1 Discussion

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)?

Assembly Bill (AB) 52 requires that, prior to release of an EIR for a project, the lead agency shall consult with Native American Tribes to identify, evaluate, and mitigate impacts to tribal cultural resources if a Tribe has formally requested consultation (OPR 2017). A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) is currently in process and results are yet to be received. However, even if the SLF search indicates an absence of site-specific resources, this does not necessarily indicate the absence of cultural resources in the project area. As such, to allow for compliance with AB 52, which mandates Native American consultation, this issue will be included in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

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?

As above, to allow for compliance with AB 52, which mandates Native American consultation if requested, this issue will be included in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

2.25 UTILITIES AND SERVICE SYSTEMS

CEQA ENVIRONMENTAL CHECKLIST QUESTIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XVIII. Utilities and Service Systems.				
Would the project:				
a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication 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 that 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?	☐	☐	☒	☐

2.25.1 Discussion

a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

As offsite utilities would need to be constructed to serve the project site, this issue will be included in the main body of the Draft EIR, with the exception of telecommunications facilities. During project operation, phone and internet needs would be served by existing telecommunications service providers. Although the project would require new electronic wiring, cabling, and equipment, the project would not require the construction of new or expansion of existing telecommunications facilities, such as towers and substations, that would cause significant environmental effects. As such, telecommunications facilities will be excluded from analysis in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

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

Under Water Code sections 10910 et seq. (commonly known as SB 610), a water supply assessment (WSA) must be undertaken to determine water supply sufficiency for a 20-year projection in addition to the demand of existing and other planned future uses for any project that is subject to CEQA and proposes (1) residential development of more than 500 dwelling units; (2) commercial development of more than 250,000 square feet of floor space; (3) a retail center with more than 500,000 square feet of floor space; (4) a hotel or motel having more than 500 rooms; (5) an industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area; (6) a mixed-use project that includes one or more of the projects specified above; or (7) a project that will demand an amount of water equal to, or greater than, the amount of water required by 500 dwelling units. Because the project does not fall under any of the identified parameters, no WSA is required for the project.

As identified in Section 2.3.1 of the Project Description (Offsite Improvements), during operation, the travel stop would have an estimated water demand of approximately 7,000 to 9,000 gallons per day (gpd) or 7.8 to 10.1 acre-feet per year (AFY). Per the Water Enterprise Financial Analysis and Rate Study for City of Susanville (IG Service 2024), Susanville's water supply is naturally occurring and locally available and the overall system is capable is delivering nearly twice the daily peak demand. As such, there would be sufficient water supplies available to serve the proposed project. Additionally, the City of Susanville's Urban Water Management Plan (UWMP) identifies city water customer needs are met by utilizing water from Bagwell Springs (located one mile north of the city), Cady Springs (located two miles west of the city) and four wells (Well #1 and Well #3 and #4 and #5) located southeast in the city (City of Susanville 2022). As identified in the UWMP, the city has a water source annual capacity of 2,785.70 million gallons (or approximately 9,948 acre feet). This figure is considerably greater in wet years as Cady Springs produces an annual average of 473 million gallons in a dry year to 788.4 million gallons in a wet year, approximately 49 percent more, The city thus has ample water rights and capacity for the projected future demand of the project (7.8 to 10.1 AFY) and future demand of other residential and commercial consumers. Impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

c) Result in a determination by the wastewater treatment provider that 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?

According to the Susanville Sanitary District, the Susanville Wastewater Treatment Plant (WWTP) treats approximately 1.0 million gallons of wastewater per day during dry weather and approximately 1.2 million gallons per day (mgd) in wet weather. The WWTP has the capacity to treat and discharge 2.0 mgd average monthly flow and 3.1 mgd peak wet weather flow, with a maximum hydraulic capacity of 4.0 mgd. The typical water demand to sewer demand ratio is 1.15:1, meaning that for every 115 gallons of water consumed, 100 gallons of wastewater would be generated. However, assuming all water used by the project (approximately 7,000 to 9,000 gpd or 7.8 to 10.1 AFY) resulted in an equal amount of wastewater generated, the additional 9,000 gpd would be well within the WWTP's ability to treat and discharge the generated wastewater. As such, the WWTP has sufficient capacity to serve the project's projected demand, in addition to existing use. Impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

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?

CalRecycle provides a reference list of solid waste generation rates, which can be used to estimate the amount of solid waste generated by new developments. The reference list includes estimates of solid waste generation rates for

various land use types in the commercial, industrial, institutional, residential, and service sectors. These generation rates are compiled from various sources, including local agency planning guidance and environmental documents (CalRecycle 2019a). Table 2-4 includes a summary of the estimated solid waste generated by the project based on CalRecycle generation rates for the various land uses that are proposed. Although solid waste generation rates were not available for all land use types proposed under the project, the most similar land use types were selected. As shown in Table 2-4, the project is estimated to generate approximately 426 pounds (0.213 tons) per day of solid waste based on CalRecycle disposal rates.

Table 2-4 Summary of CalRecycle Proposed Land Uses

Project Land Use	Size	CalRecycle Land Use	CalRecycle Generation Rate	Estimated Solid Waste Generated from the Project
Travel Stop				
Convenience Store	7,943 SF	Commercial Retail	0.046 lb/SF/day	365 lbs/day
Fast-Food Restaurants (one w/drive-through)	5,062 SF	Restaurant	0.005 lb/SF/day	25 lbs/day
RV Park				
Overnight RV Parking	10	Motel	3.6 lb/unit/day	36 lbs/day
Total	-	-	-	**426 lbs/day**

Notes: SF = square feet; lb = pound

1 CalRecycle solid waste generation rates were not available for all land use types proposed under the project. The most similar land use types were selected.

2 CalRecycle generation rates are compiled from various sources, including local agency planning guidance and environmental documents. These rates are not officially endorsed by CalRecycle but are useful in providing a general level of information.

Source: CalRecycle 2019a.

CalRecycle's waste generation rates account for all materials discarded, whether or not they are later recycled or disposed in a landfill (CalRecycle 2019a). The Lassen Regional Solid Waste Management Authority (LRSWMA) is a joint powers agency formed in 1998 by and between the City of Susanville and the County of Lassen. LRSWMA operates two municipal solid waste landfills and nine transfer stations within Lassen County. The closest site to the project site is the Bass Hill Landfill (5.4 miles southeast by road), with the Westwood Landfill and Transfer Station 24.6 miles west (LRSWMA 2024). According to the Solid Waste Information System (SWIS), Bass Hill landfill has a remaining capacity of 603,404 cubic yards with an estimated closure date of 2032 and Westwood Landfill has a remaining capacity of 62,207 cubic yards and an estimated closure date of 2027 (CalRecycle 2019b; 2019c). The USEPA's Landfill Methane Outreach Program (LMOP) Landfill and Landfill Gas Energy Project Database (2024) notes that the Bass Hill landfill has an annual waste acceptance rate of 22,457 tons per year and Westwood landfill has 2,160 tons per year. The 426 lbs/day would equate to 155,490 lbs/year or approximately 78 tons/year, which would represent 0.35 percent of the annual waste accepted by the Bass Hill landfill site. Additionally, the Bass Hill landfill site has a maximum throughput of 300 tons per day (tpd) so the 426 lbs/day (0.213 tons/day) would be well below the 300 tpd daily capacity threshold (representing 0.071 percent). The estimated 0.213 tons/day of solid waste that would be generated during project operation would represent a negligible increase in the daily waste received at the Bass Hill landfill. Therefore, it is foreseeable that a solid waste hauler would be able to serve the project. Furthermore, solid waste that would be generated during project operation would not cause the facility to operate near maximum capacity because existing throughput is substantially lower than capacity. Based on the total available capacity of the landfill, the incremental increase in solid waste generated as a result of the project would not substantially affect landfill capacity such that additional waste disposal facilities would be required.

The project would generate standard construction and demolition debris, which may include concrete, asphalt, wood waste, glass, metals, gypsum, and cardboard. Earthmoving activities would not generate large amounts of soil waste because cut and fill for finish grading would be balanced onsite. Demolition activities would be minor as the current site is vacant land. All waste would be disposed of and recycled according to all federal, State, and local solid waste requirements, including AB 939 and the CALGreen Building Code. CALGreen stipulates that 65 percent of

construction waste shall be diverted, while AB 939 specifies 50 percent. Based on the discussion above, the project would not be expected to generate solid waste in excess of the capacity of local infrastructure. In addition, the project would comply with all applicable state and local requirements including those pertaining to solid waste, construction waste diversion, and recycling. For these reasons, impacts related to solid waste are considered less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

All local governments, including the City of Susanville, are required under AB 939, the Integrated Waste Management Act of 1989, to develop source reduction, reuse, recycling, and composting programs to reduce tonnage of solid waste going to landfills. Cities must divert at least 50 percent of their solid waste generation into recycling. If the local jurisdiction's solid waste exceeds the target, the local jurisdiction would be required to pay fines or penalties from the State for not complying with AB 939. The waste generated by the project would be incorporated into the waste stream of City of Susanville, and diversion rates would not be substantially altered. The project does not include any component that would conflict with state laws governing construction or operational solid waste diversion and would comply pursuant to local implementation requirements. Impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

2.26 WILDFIRE

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

2.26.1 Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Slow-moving construction-related traffic along local roadways could reduce optimal traffic flows and could delay emergency vehicles traveling through the project area. Project construction activities could cause temporary lane closures on SR 36 and Skyline Road as the project would include a variety of offsite improvements, including installation of utility connections and junction modifications.

Goal 5, Objective 5.3 of the Lassen County Multi-Jurisdictional Hazard Mitigation Plan Update (2018) is to 'review and improve, if necessary, emergency traffic and evacuation routes; communicate such routes to the public and communities.' Additionally, a joint Lassen County and City of Susanville Emergency Operations Plan (2019) has been prepared which describes how the County and City will organize and respond to emergencies and disasters in the community and to prevent, protect against, mitigate the effects of, respond to, and recover from the hazards and threats that pose the greatest risk to the community. Within the Emergency Operations Plan, Emergency Function (EF) 1 describes how the County and City will coordinate transportation needs during a time of a major emergency or disaster, including coordinating transportation activities to supplement the efforts of emergency response agencies to protect the public.

To prevent potentially significant construction-related traffic impacts, the project's contractor would implement a construction traffic management plan, per PDF-TR-1, prior to the initiation of any construction activities to ensure that access for all road users is maintained near the project site or impacted to the least extent feasible. Furthermore, the project would be subject to review and approval by all applicable city departments to ensure that the proposed project complies with City requirements related to emergency response. The project would be designed and

maintained in accordance with applicable standards associated with vehicular access, such that interference with existing emergency response or evacuation plans would not occur. As a condition of project approval, the City of Susanville Fire and Police Departments would review the project plans to ensure that adequate emergency vehicle access is provided. Given proper design of ingress/egress driveways and compliance with applicable standards and local regulations, operation of the project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

The project would not interfere with the City/County's emergency plans and would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, as part of each of those plans is to put mechanisms in place to communicate potential impacts to emergency traffic and evacuation routes. As such, construction and operation of the project would not interfere with an adopted emergency response plan and/or emergency evacuation plan. Impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

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?

The project site is vegetated but is on the edge of an urbanized area, away from wildlands and the risks of wildfire. The project site is located outside the CAL FIRE State Responsibility Area (CAL FIRE 2023) and also outside the Local Responsibility Area Very High or High Fire Hazard Severity Zone. Additionally, as shown in the Site Plan (Figure 2-3), the project would include fire hydrants, a 200,000-gallon fire water storage tank and fire booster pump to aid fire suppression. As the project site is not within a Very High or High Fire Hazard Severity Zone, the risks from wildland fires are thought to be minimal, making the risk of loss, injury, or death involving wildland fires an insignificant risk. Additionally, the project would be required to comply with all applicable fire codes and building code standards. Furthermore, the project site is flat and located approximately five minutes' drive from the SFD's station at 1505 Main St, Susanville, thus should a fire break out, it should not be uncontrollable as SFD should be able to respond in a timely manner. Additionally, the California Department of Forestry and Fire Protection (CalFire) has a station on Highway 36 near Prattville Road to the north, the Susan River Fire Protection District has a facility to the south near Johnstonville and the California Department of Corrections and Rehabilitation also has a fire station to the northeast. In the event of a fire, the Susanville Interagency Dispatch Center dispatches the SFD, CalFire, the Susan River Fire Protection District and the California Department of Corrections and Rehabilitation Fire teams (Lassen County Times 2024). These stations therefore could provide firefighting capabilities in the event SFD was occupied elsewhere. As mentioned previously, the predominant wind directions are from the west, west-north-west and west-south-west, thus wind patterns would mostly be blowing away from the project site and not towards areas of vegetation or project occupants. As such, the project would not exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or lead to the uncontrolled spread of a wildfire. Impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

c) Require the installation 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?

While the project would install a new access road, fire hydrant, fire water storage tank, fire booster pump and new utilities, the project is not within the CAL FIRE State Responsibility Area and also outside the Local Responsibility Area Very High or High Fire Hazard Severity Zone. As such, the installation of associated infrastructure would not exacerbate fire risk or result in temporary or ongoing impacts to the environment. Impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

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?

As specified previously, the project site is predominantly flat and thus would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be less than significant, and no further analysis of this issue is warranted in the main body of the Draft EIR.

Significance of impact: Less than significant.

2.27 CUMULATIVE IMPACTS AND MANDATORY FINDINGS OF SIGNIFICANCE

CEQA ENVIRONMENTAL CHECKLIST QUESTIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XIX. Mandatory Findings of Significance.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☒	☐	☐	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

2.27.1 Discussion

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

Currently, a number of resource-specific assessments are ongoing, and as such, this topic will be assessed within the Draft EIR. In particular, the analysis of project impacts to Biological Resources related to candidate, sensitive, special-status species, and federally- or state-listed endangered, threatened, or rare species is currently ongoing, as is the analysis of impacts to historical resources and unique archaeological and paleontological resources; thus, these issues will be analyzed in further detail in the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

The proposed project would result in less than significant impacts related to aesthetics, agricultural and forestry resources, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, and wildfire; therefore, the proposed project would not have any potential to contribute to a cumulatively considerable significant impact on any of these resource areas. Currently, a number of resource-specific assessments are ongoing, and as such, cumulative impacts for the topics not mentioned above will be assessed within the main body of the Draft EIR.

Cumulative impacts, as opposed to project-level impacts, are impacts on the physical environment that result from the incremental effects of the proposed project when added to other past, present, and reasonably foreseeable future projects. Three known cumulative projects have been identified within 1.5 miles of the project site.

Table 2-5 List of Cumulative Projects within 1.5 Miles of the Project Site

Project Name	Details	Distance from Project Site	Construction Status
City and Caltrans Gateway Project	Pedestrian safety improvements, curb gutter sidewalk, and landscaping.	0.25 Miles Northwest	On-Going with an expected completion date of May 2025
Thompson Family Trust 70 Space RV Park	70 Space RV Park, located at 300 Bella Way, Susanville, CA 96130	0.48 miles	Should break ground in spring of 2025
Hat Creek Mine Project	Located on approx. 460 acres of a 640-acre parcel, located approximately 1.5 miles east of State Routh 139 off of Skyline Road to the northeast of Susanville in Lassen County (APN 101-110-024)	1.10 miles at its closest part	Mining operations are estimated to begin in the spring of 2025, following permit approval
Johnstonville Road Gas and Water Line Upgrades	Increase water main line to 12" and increase gas line to 8"	0.5 miles	TBD
City and Caltrans Gateway Project	Pedestrian safety improvements, curb gutter sidewalk, and landscaping.	0.25 Miles Northwest	On-Going with an expected completion date of May 2025

The proposed project and cumulative projects identified in Table 2-5 would be consistent with the City of Susanville General Plan, the Lassen County General Plan and the Susanville Vicinity Area Plan (as applicable) and other applicable federal, state, and local regulations associated with aesthetics, agricultural and forestry resources, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, and wildfire. Impacts related to agricultural and forestry resources, hazards and hazardous materials, and mineral resources are generally site-specific and not additive across a landscape. In addition, the less-than-significant impacts on these resources would not add appreciably to impacts of any cumulative projects that could result in a significant cumulative impact due to the nature of identified impacts and the intensity of known cumulative projects. Therefore, cumulatively considerable impacts related to these resource areas would not occur as a result of the project.

However, as potential impacts on air quality, biological resources, cultural resources, energy, geology and soils (paleontological resources), greenhouse gas, noise, transportation, and utilities may occur as a result of the proposed project, a discussion of cumulative impacts related to specifically these resources will be provided in the forthcoming EIR.

Significance of impact: Potentially significant impact.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Currently, a number of impact analyses related to potential impacts on human health are ongoing, and as such, this topic will be assessed within the main body of the Draft EIR.

Significance of impact: Potentially significant impact.

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Appendix A

Geological Investigation Report

GEOTECHNICAL INVESTIGATION REPORT
LOVES TRAVEL STOP & COUNTRY STORE
SOUTHEAST PORTION OF APN 107-280-017
SUSANVILLE, CALIFORNIA

A Report Prepared For:

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1.0 INTRODUCTION AND SCOPE

1.1 Project Description

This report presents the results of Reno Tahoe Geo Associates' (RTGA's) geotechnical investigation for the proposed new Loves Travel Stop and Country Store to be located northwest of the intersection of State Route 36 and Skyline Road in Susanville, California. The site vicinity is shown on Plate 1 - Project Location. The proposed travel stop site is comprised of approximately 15 acres within the southeast corner of APN: 107-280-017, an 81-acre parcel located in Lassen County, California on the south side of the Susan River. The subject property is currently undeveloped land.

The portion of the property which is to be developed is bordered on the east by SR 36, on the south by former railroad right-of-way, which is now Skyline Road, on the north by the Susan River, and to the west by the remainder of the parcel. The project will involve construction of a travel stop facility with paved access roads, parking areas, auto and truck fueling areas, a convenience store, a high-mast sign, fuel tanks, and other ancillary facilities.

We assumed that the maximum anticipated wall and column loads for the store building will be about 1 kip to 3 kips per lineal foot and 30 kips to 45 kips, respectively. Vertical loads for the high-mast sign are anticipated to be less than 50 kips. A site plan showing the existing site aerial imagery and exploration locations is shown on Plate 2. Based on a preliminary site plan dated November 20, 201, a high mast sign was proposed to be located near the drilled location of boring B-01. The Country Store was located near boring B-07, and auto and truck fueling islands were proposed in the vicinity of borings B-04 and B-08, respectively. Detention and infiltration basins were located between the facility and future Skyline Road, in the vicinity of percolation tests P-1 through P-3.

1.2 Purpose and Scope of Work

The purpose of this investigation was to explore and evaluate the subsurface conditions at the project site, and to provide our geotechnical engineering recommendations for project design and construction. The scope of our services included the following:

- General geologic setting and seismicity;
- General soil and groundwater conditions at the project site, with emphasis on how the conditions are expected to affect the proposed construction;
- Recommendations for earthwork construction, including site preparation recommendations, a discussion of reuse of existing near surface soils as structural or non-structural fill, and a discussion of remedial earthwork recommendations, if warranted;
- Recommendations for temporary excavations and trench backfill;
- Recommendations for conventional shallow spread foundation design including soil bearing values, minimum footing depth, resistance to lateral loads and estimated settlements, and International Building Code Soil Class for use in structural design;
- Subgrade preparation for slab-on-grade concrete and pavement;
- Lateral earth pressures and drainage recommendations for short retaining structures;
- Potential for site soils to corrode steel, or to adversely react with concrete; and
- Pavement design based on site soil classifications assuming we are provided truck loading values.

1.3 References

The following information was provided to Reno Tahoe Geo Associates, Inc. (RTGA) over the course of this investigation and served as the basis of our understanding of the project type and scope:

Lane Engineers Inc., 2021, Conceptual Site Layout Plan for Loves Travel Stop and Country Store, Susanville, California.

In addition, the following published and unpublished references were reviewed during preparation of this report:

- ASCE, 2019, ASCE 7 Hazard Tool, accessed February 2022.

- County of San Diego, County of San Diego BMP Design Manual, Geotechnical Engineer Analysis, Section D.1 – Analysis of Infiltration Restrictions, dated January 1, 2019.
- Natural Resources Conservation Service (NRCS) Web Soil Survey accessed November 2021.
- Grose, T.L.T., Saucedo, G.J., and Wagner, D.L., 1990, Geologic map of the Susanville quadrangle, Lassen and Plumas Counties: California Division of Mines and Geology Open-File Report 91-1, 26 p. pamphlet, 1 sheet, scale 1:100,000.
- Wills, C.J., 1990, Faults in the Susanville-Eagle Lake area, Lassen County, California: California Division of Mines and Geology Fault Evaluation Report 211, 6 p., in Fault Evaluation Reports Prepared Under the Alquist-Priolo Earthquake Fault Zoning Act, Region 3 – Northern and Eastern California: California Geological Survey CGS CD 2002-03 (2002).
- U.S. Fish and Wildlife Service Website (www.https:/fws.gov/wetland/data/mapper.html
- Reno Tahoe Geo Associates (RTGA), 2022, Phase 1 Environmental Assessment, Loves Travel Stop & Country Store, Susanville, California.

2.0 FIELD EXPLORATION AND LABORATORY TESTING

2.1 Field Exploration

Explorations consisted of a total of thirteen soil borings, six shallow boreholes for percolation testing, and a Refraction Microtremor (ReMi) seismic survey. Our selection of field exploration locations was based on client recommendations, the anticipated project layout, and site access. Exploration locations are shown on Plate 2. Borehole logs are presented as Plates 3 through 15.

2.2 Borings

Thirteen borings (B-01 through B-13) were advanced on January 12 through 14, 2022. Twelve borings were drilled using 6-inch-outside-diameter (O.D.), 3-¼ inch inside diameter (I.D.), hollow-stem augers and a truck-mounted CME 55 soils sampling drill rig. One borehole (B-07) was drilled to 30 feet by the mud rotary method to allow liquefaction analysis. The maximum depth of exploration was 40 feet below the existing ground surface in boring B-07 at the high mast sign location. The intended depth of B-07 was 50 feet but practical refusal occurred due to heaving sands up the augers due to saturated sands in an otherwise dense formation. Borehole logs are presented as Plates 3 through 15. The Unified Soil Classification System (USCS) description and a key to log symbols is presented as Plate 16.

The native soils were sampled in-place every 2-1/2 to 5 feet depth by use of a 1.5-inch-inner-diameter (I.D.), 2-inch outer diameter (O.D) Standard split-spoon sampler or a 2.6-inch-I.D., 3-inch-O.D. Modified California sampler. These samplers were driven by a 140-pound automatic drive hammer with a 30-inch stroke. The number of blows to drive the sampler the final 12 inches of an 18-inch penetration (Standard Penetration Test [SPT]- ASTM D 1586) into undisturbed soil is an indication of the density and consistency of the material. Penetration resistance using the Modified California sampler is higher due to the larger diameter and greater ground resistance. Modified California sampler blow counts should be multiplied by 0.65 to obtain a rough equivalent SPT blow count. Where appropriate Shelby (push) tubes and/or California Modified split-spoon samples were collected. Ground water levels were measured where encountered.

Soil samples were packaged and sealed in the field to reduce moisture loss and disturbance and returned to our laboratory for testing. After borings were completed, they were backfilled with cement grout per State of California requirements.

2.3 Percolation Testing

Two shallow boreholes were advanced each of the three locations P-1 to P-3 for percolation testing. At each location, one boring was advanced to 3 feet depth, and a second was advanced to 5 feet depth, with a 6-inch-diameter borehole and a 4-inch-diameter plastic casing loosely installed in each. Each borehole was presoaked for approximately 24 hours before starting testing. The percolation tests were performed in general conformance with methods specified for septic testing in the State of California. Testing consisted of filling each borehole to 12 inches above its base and then measuring the rate of water level drop in minutes per inch. The tests were run for about 2 to 4 hours with no drop in water levels.

Percolation test interpretation assumes that there is infiltration of the water advanced into the casing up the sides of the borehole. Therefore, the Porchet method (County of San Diego, 2019) was used to interpret the infiltration rate (downward percolation only) from the percolation test results. Results of percolation testing are summarized on Table 1 – Percolation Testing Results. The testing, conducted primarily in the southeast portion of the site, shows the shallow clay present there is essentially impermeable from the perspective of conventional infiltration methods.

Table 1: Percolation Testing Results

Location	Description	Depth (ft.)	Percolation Rate (Minutes per Inch)	Infiltration Rate (Minutes per Inch)
Perc-1a	Sandy Clay	3	0.0	0.0
Perc-1b	Sandy, Silty Clay	5	0.0	0.0
Perc-2a	Sandy, Silty Clay	3	0.0	0.0
Perc-2b	Sandy, Silty Clay	5	0.0	0.0
Perc-3a	Silty, Sandy Clay	3	0.0	0.0
Perc-3b	Silty, Sandy Clay	5	0.0	0.0

2.4 ReMi Shear Wave Velocity Measurements

One ReMi (Refraction Micrometer) survey was also utilized to obtain shear wave velocity measurements near the store building footprint to complement our other explorations (see Plate 2). The ReMi survey consists of placing twelve geophones placed in a line at 33 feet spacing, which then record background vibration including natural microtremors, nearby traffic, and other sources. These data are processed to determine the slowest arrival time of seismic waves to interpret a shear-wave-velocity profile with depth. ReMi provides a means to obtain basic subsurface profile information on an essentially continuous basis across the explored location. One ReMi shear wave velocity array was utilized to obtain one- and two-dimensional shear wave velocity profiles. ReMi provides a means to obtain basic subsurface profile information on an essentially continuous basis across the explored location. The seismic profile was conducted to obtain general information about stiffness or soils versus depth and shear-wave velocity to a depth of 100 feet for 2019 CBC Site Class recommendations.

The average shear wave velocity measured in the upper 100 feet of the soil/bedrock horizon was 760 feet per second. The ReMi survey results are shown on Plate 17.

2.5 Laboratory Testing

Laboratory tests were performed on selected samples to aid in soil classification and to evaluate physical properties of the soils, which may affect the geotechnical aspects of project design and construction. We performed laboratory testing on selected soil samples to assess the following:

- Soil Classification (ASTM C136, C117, D422, D1140, and D4318)
- Unit Weight and Moisture Content (ASTM D2937 and D2216)

In addition, the following analytical tests were performed:

- Consolidation (ASTM D2435)
- Soluble Sulfate, Resistivity, and pH

An R-value test was not run due to observed poor soil conditions; a consolidation test was performed instead. Laboratory test results are summarized on the boring logs (Plates 3 through 15), and detailed results are provided on Plates (18 through 21).

3.0 PROJECT CONDITIONS

3.1 Site Conditions

The site is composed of approximately 15 acres which form the southeast corner of APN: 107-280-017, an 81-acre parcel located in Lassen County, California. The portion of the property which is to be developed is bordered on the east by SR 36, on the south by a former railroad embankment which is now Skyline Road, on the north by the Susan River, and to the west by the remainder of the parcel. No street address is currently assigned to the property. Access to the site was obtained through a former logging mill west of the site and then east on an unpaved road which parallels the south bank of the Susan River. The subject property is currently undeveloped land which is moderately to heavily covered by sagebrush, desert shrubs, grass, and weeds. Several barbed wire fence lines are present on the property indicating the site was likely previously used as pastureland

The subject site is located on the south side of the channel of the Susan River on basically level ground. The ground slopes towards the southeast an average gradient of 0.5 percent. The proposed site area is generally at Elevation 4,151 to 4,153 feet above mean sea level (msl) The SR 36 highway embankment and future road grade is at Elevation 4,154 at the intersection with Skyline Road, and the former railroad embankment is at Elevation 4,159 feet. The SR 36 embankment cuts off natural flow along the plain and water must divert northward to the Susan River channel. The Susan River channel is at approximately Elevation 4,145 feet.

Historic aerial photographs were reviewed as part of the 2022 RTGA Phase 1 ESA report. A former barn with associated outbuildings and a retention pond was present immediately west of the site in the 1941 aerial photograph and was still evident as recently as the 3/20/2014 Google Earth photograph but is not present in the 8/20/2019 photograph. Published maps of designated wetlands indicate the eastern border of the site is designated as a type PEM1C (emergent wetlands). The former retention pond is designated as a type PABFh (freshwater pond) wetlands.

3.2 Geologic Conditions

The ground under the subject property is described by Wagner and Saucedo (1991) as Quaternary Lake Deposits. This area was likely the extension of Honey Lake and Lake Lahontan when the climate was wetter in the Late Pleistocene (11,000 to 30,000 years before present). The NRCS

describes the site soils as Blickenstaff sandy loam. This is described as sandy loam and gravelly sandy loam with 0 to 2 percent slopes, (Map Unit Symbol MUS jc42) within Hydrologic Soil Group A. This deposit is characterized as moderately well drained with a high capacity to transmit water between 2.00 to 6.00 inches per hour.

Results of our geotechnical exploration were more consistent with the geologic map description. Borehole drilling at the site indicated near surface deposits are composed primarily of 5 to 15 feet of medium- to high-plasticity clays and silts with lesser layers of interbedded silty sand and sand/silt. The clays are assumed to be a desiccated crust in the upper portion of the former lakebed. Silty sand to poorly-graded sand with silt was dominant in this depth range on the northeast edge of the site (Borings B-05 and B-06), which may have been past channels of the Susan River.

Between 15 feet depth and 30 to 35 feet depth, the soil consisted of lightly-overconsolidated soft to firm fat clay. These materials were most likely deposited in a lacustrine environment with little desiccation to date. This material has high water contents and low strength and will be subject to consolidation settlements under additional site loads. The clay layer in some boreholes varied with depth between mostly clay (and therefore most compressible) and sandy clay layers with as low as 35-percent medium-plasticity fines. A consolidation test was performed on a sample of these materials at 20 feet depth, which indicated an overconsolidation ratio of 1.6. Strength based on pocket penetrometer readings was typically 500 to 1,500 pounds per square foot.

Starting at 35 feet depth on Boring B-01, a dense, saturated sand layer was encountered. Results of the ReMi profile indicate that this dense soil boundary is generally at 30 to 40 feet depth under the building site (shear wave velocity of at least 600 feet per second at 30 feet depth and 800 feet per second (dense) at 40 feet depth), and soil materials are consistently dense below that depth. Whether the bottom of clay layers stays consistent on the northern portion of the site or increases in depth is not known.

Groundwater was encountered at depths of 18 to 20 feet during geotechnical assessment drilling. Some locations of perched water at depths as shallow as 6 feet were also noted. Surface ponding was noted at the southeast corner of the site during the field investigation due to recent snowmelt runoff.

We suspect that the permanent groundwater table is about 10 feet below the level of the Susan River due to historic or current groundwater pumping.

3.3 Geologic Hazards

3.3.1 Seismicity

The project site lies within an area with a high potential for strong earthquake shaking from large earthquakes in western Nevada and eastern California. The maximum possible earthquake in this area that could occur locally would be in the range of magnitude 7.0 to 8.0 along the Honey Lake Fault Zone with an epicenter located approximately 20 miles southeast of the site.

3.3.2 Faults

An earthquake hazards map is not available for the project area. The published geologic hazards maps show unnamed fault segments of the Susanville – Eagle Lake area approximately 1-1/2 miles west of the site. These Class A faults have undergone undifferentiated Quaternary movement with unspecified movement intervals. No active faulting has been mapped beneath the project site.

The California Alquist Priolo Earthquake Fault Zone Act has developed and adopted the criteria for evaluation of Quaternary age earthquake faults in California. *Active Faults* are defined as those with evidence of movement within the past 11,000 years (Holocene time). Active Faults normally require that occupied structures be set back a minimum of 50 feet (100-foot-wide zone) from the ground surface fault trace. The project site does not lie within a designated Alquist Priolo Earthquake Fault Zone. Therefore, no fault setbacks for occupied structures are needed.

3.3.3 Liquefaction

Liquefaction is a nearly complete loss of soil shear strength in sandy soils that can occur during an earthquake as cyclic shear stresses generate excessive pore water pressure between the soil grains. Because the site subsurface sandy soils are unsaturated to 18 to 20 feet depth, and soils below 15 feet depth to 35 feet depth are primarily medium- to high-plasticity clays, the potential for liquefaction is minor to negligible. The presence of soft clays may amplify ground accelerations at longer period motions as described by the California Building Code.

4.0 DISCUSSION AND CONCLUSIONS

From a geotechnical engineering standpoint, the proposed travel stop and store may be developed as planned with some constraints. Based on the results of our field investigation and laboratory testing programs, we have developed the following conclusions. These conclusions may change if additional information becomes available.

- Surface soils encountered in our borings consisted predominantly of 5 to 15 feet of stiff to hard expansive clay. Expansive clays will require separation from footings and pavements by at least 2 feet of compacted granular fill, including the thickness of aggregate base and subbase layers.
- The site is underlain by medium-stiff clay layers below 15 feet depth that are weak and compressible. Settlement is predicted to range between 0.3 to 0.4 inch for 2.5 feet of fill to 2 to 2.6 inches for 10 feet of fill. The building loads are expected to be light and are separated from the compressible clay layers by at least 10 feet of low-compressibility materials such that they are not expected to induce significantly greater amounts of settlement. Settlement can be reduced by minimizing fill thickness, waiting after grading the site until fill settlements are complete, or by preloading the building or other critical components.
- Groundwater was encountered at depths of 18 to 20 feet. Perched groundwater was encountered at 6 feet atop fat clay underlying silty sand in borehole B-6. The observed groundwater should not interfere with the proposed foundation excavations. No other subsurface geologic hazards were noted.
- The percolation tests near the south edge of the site have minimal infiltration capability. There are limited areas of non-expansive soils on the northeast edge of the site which would be suitable for infiltration basins.

Specific recommendations for project design and construction including mitigation of potential problems described above are presented in Section 5.0.

5.0 RECOMMENDATIONS

5.1 Site Clearing and Preparation

Prior to construction, surface vegetation and soils with organics should be stripped and disposed of outside the construction limits or stockpiled for use in non-structural areas. We estimate the average depth of stripping to be approximately 3 inches.

Stripped topsoil, (less any debris), may be stockpiled and reused for landscape purposes. All man-made debris should be removed from the site. RTGA representative should be present during stripping and site preparation operations to observe stripping and grubbing depths. Excavations resulting from removal operations should be cleaned of all loose materials and widened as necessary to permit access to compaction equipment.

Dust control will be the responsibility of the contractor. A dust control plan should be prepared by the owner, civil engineer, or contractor prior to the start of grading.

Following site stripping and any required grubbing, we recommend all areas to receive structural fill or to be used for the future support of pavements be scarified to a depth of at least 8 inches, uniformly moisture-conditioned to near optimum moisture content, and compacted to at least 90 percent relative compaction*.

5.2 Earthwork

5.2.1 General Site Grading

For the purposes of this report, soils with greater than 30 percent fines are either fine-grained or clay soils, and granular soils are those with less than 30 percent fines. Granular soils are those not defined by either criterion above. Structural areas are portions of the site that will support the proposed structures, foundations, or pavements. Structural areas should be supported on compacted structural fill.

*Wherever referenced in this report, relative compaction should be determined by comparing the in-situ densities of the site soils to the maximum dry density and optimum moisture content as established in accordance with the ASTM D1557 Test Method.

In general, existing native site soils are fat clays which are not suitable for direct support of structures of pavements. There is an exception on the northeast corner of the site where at least two borings encountered silty sand and poorly-graded sand with silt which are suitable for structural support or reuse as structural fill. Imported structural fill, where required, should be granular and free of organics and should meet the specifications presented in Table 2. All imported fill materials should be approved by the project engineer prior to being transported to the site.

TABLE 2 - GUIDELINE SPECIFICATION FOR IMPORTED STRUCTURAL FILL

Sieve Size	**Percent by Weight Passing**	
4 Inch	100	
¾ Inch	70 – 100	
No. 4	35 – 90	
No. 40	10 – 65	
No. 200	5 – 30	
Percent Passing No. 200 Sieve	**Maximum Liquid Limit**	**Maximum Plastic Index**
5 – 20	40	15
21 – 30	30	10

Soils used for structural fill should be uniformly moisture conditioned to within two percent of optimum moisture content and placed in layers of eight inches or less in loose thickness. The lift should then be compacted with appropriate compaction equipment to achieve at least 90 percent relative compaction. Excavated native soils that do not meet the requirements presented above in Table 2 should be stockpiled in a designated area for subsequent off-site disposal or moisture conditioned as necessary and placed in landscape areas of the project. Prior to densification, the moisture content of the soils should be determined to evaluate the need for moisture conditioning. After the densification process, a firm, stable surface should be produced. No material should be placed, spread, or rolled while it is frozen or thawing, or during unfavorable weather conditions.

5.2.2 Stabilizing Fill

If construction occurs in wet weather, surface soils can be well above optimum moisture and impossible to compact. In some situations, moisture conditioning of the top 12 inches of subgrade

may allow the soil to dry sufficiently to allow compaction. Where construction schedules preclude delays or drying is ineffective, mechanical stabilization will be necessary. Mechanical stabilization may be achieved by over-excavation and/or placement of an initial 12- to 18-inch-thick lift of 12-inch-minus, 3-inch-plus, well graded, angular rock fill. The more angular and well-graded the rock is, the more effective it will be. This fill should be densified with large equipment, such as a self-propelled sheepsfoot or a large loader, until no further deflection is noted. Additional lifts of rock may be necessary to achieve adequate stability. A test section to confirm performance of any planned stabilizing fill is recommended.

The use of a geotextile will prevent mud from pumping up between the rocks, thereby increasing rock-to-rock contact and decreasing the required thickness of stabilizing fill. The geotextile should meet or exceed the following minimum properties as stated in Table 3.

TABLE 3 - MINIMUM AVERAGE ROLL STRENGTH PROPERTIES FOR GEOTEXTILE	
Trapezoid Strength (ASTM D 4533)	80 lbs.
Puncture Strength (ASTM D 4833)	120 lbs.
Grab Tensile/Elongation (ASTM D 4632)	245 @ 50 %

As an alternate to rock fill, a geotextile/gravel system may be used for stabilization. Aggregate base, Class C or D drain rock, or pit run gravels should be placed above the geotextile. Regardless of which alternate is selected, a test section is recommended to determine the required thickness of stabilization.

5.2.3 Temporary Trench Excavation and Backfill

Based on the subsurface conditions encountered within our boreholes, we anticipate that excavations for footings and utility trenches can be made with conventional equipment. Any excavations below about 10 to 12 feet below grade will encounter medium-stiff, saturated, moisture sensitive clays which will require low ground pressure equipment, performing excavations from the upper ground surface, or stabilizing fill at the bottom of the excavations. Stabilizing fill would likely consist of drain rock over a geotextile in this instance, provided concentrated construction loads are not planned in the

bottom of the excavations. If excavations are performed during high groundwater conditions, we expect the walls of the footing trenches in areas of surficial clays may potentially slump or creep below grade. Shoring or sloping of trench walls deeper than 4 feet will be necessary to protect personnel and provide temporary stability. All excavations should comply with current OSHA safety requirements for Type C soils (Federal Register 29 CFR, Part 1926).

Any excavations which extend below the site groundwater level will need to be dewatered. Only minor areas of dewatering of perched groundwater are likely within the planned depth and excavations and primarily if excavation is performed in winter or spring months. Dewatering of narrow trench excavations may be accomplished by using a system of ditches directing water inflow to sumps where water can be removed by pumps. To maintain stability of the excavation bottom, groundwater levels should be drawn down to a minimum of two feet below the lowest portion of the excavation. Surface runoff water should be prevented from entering excavations.

For the construction of underground utilities, pipe zone backfill (material beneath, and in the immediate vicinity of the pipe) should consist of clean, granular material free of clay and organic matter and be of a size such that 100 percent passes the ¾-inch sieve, not more than 10 percent passes a No. 200 sieve, and the material has a minimum sand equivalency of 30. Trench intermediate backfill (material placed between the pipe zone backfill and finished subgrade) may consist of native soil that is free of debris and organic matter and has a maximum particle size of 4 inches.

Backfill for trenches or other excavations within pavement areas, beneath slabs, and adjacent to foundations should be compacted in 6- to 8-inch layers with mechanical tampers. Jetting and flooding should not be permitted. We recommend all backfill be compacted to at least 90 percent relative compaction. The moisture content of compacted backfill soils should be within two percent of the optimum. Poor compaction in utility trench backfill may cause excessive settlements resulting in damage to the pavement structural section or other overlying improvements. Compaction of trench backfill outside of improvement areas should be a minimum of 85 percent relative compaction to resist erosion.

5.3 Seismic Design Parameters

The 2019 California Building Code (CBC), adopted by Lassen County, requires a detailed soils evaluation to a depth of 100 feet to develop appropriate seismic design criteria. Geophysical analyses of the upper 100 feet of subsurface soils were performed as described in the Section 2.1.2 ReMi Shear Wave Velocity Measurements of this report. The results of the analyses indicate average shear wave velocity of 760 feet per second in the upper 100 feet of the site soils. This would potentially indicate a Site Class D, however ASCE 7-16 indicates that a site should be classified as Site Class E where there is evidence of soils greater than 10 feet thick with an undrained strength less than 500 psf, water contents greater than 40 percent, and plasticity index of greater than 20. This limitation applies to this site, making it Site Class E.

Under the Site Class E requirements, a site-specific ground motion assessment would commonly be required for larger or more complex structures. A site-specific ground motion assessment would not be required only if:

- the structure is NOT seismically isolated or seismically damped; and
- for the short period spectral response S_s being equal to or greater than 1.0 (it is, see Table 4) the site coefficients Fa and Fv (implied) are taken from the definition for Site Class C (ASCE 7-16 11.4.8 Exception 1); and
- for the long period spectral response coefficient S_1 being greater than or equal to 0.2 (it is, see Table 4) a site-specific ground motion hazard assessment would not be required, if the fundamental period of the structure will be less than the Transitional Fundamental Period (ASCE 7-16 11.4.8 Exception 3). For this exception to be valid, the equivalent static force method is to be used for design. The Transitional Fundamental Period is 2.307 seconds; it is almost certain that single-story structures such as the Country Store will have a fundamental period less than 2.307 seconds, however we do not know if the high-mast-sign will have a fundamental period less than this.

Table 4 below provides the seismic design parameters assuming that both Exceptions 1 and 3 are valid for this site. If longer period structures such as the high-mast sign do require a site-specific ground motion analysis, RTGA can provide this evaluation.

TABLE 4 – SEISMIC DESIGN CRITERIA (2019 CBC/ASCE/SEI 7-16)	
Approximate Latitude	40.400072
Approximate Longitude	-120.63074
Spectral Response Acceleration at Short Period S_s	1.013
Spectral Response Acceleration at 1-Second Period S_1	0.351
Site Class	E
Site Coefficient F_a, decimal (determined for Site Class C, per ASCE 7-16 section 11.48 Exception 1)	1.2
Site Coefficient F_V, decimal (determined for Site Class C, per ASCE 7-16 section 11.48 Exception 1)	1.5
Site Adjusted Spectral Response Acceleration at Short Periods S_{ms},	1.216
Site Adjusted Spectral Response Acceleration at Long Periods S_{m1},	0.527
Transition Fundamental Period (seconds) between Short and Long Period Response, $Ts = S_{d1}/S_{ds} = S_{m1}/S_{ms}$	2.307
PGA_M (Adjusted Peak Ground Acceleration)	0.518

5.4 Settlements

The soil profile from 15 to 30 feet depth includes soils that have potential for significant settlement. Consolidation settlements were calculated based on the consolidation testing from Boring B-07. The consolidation settlement will require dissipation of excess pore pressure to occur over time. A summary of anticipated settlements based on thickness of fill is provided in Table 5. The higher value assumes the soil is lightly-overconsolidated and the lake clay profile is entirely clay, the lower settlement may result if the clay layer is interbedded with sandy clays or silty sand layers which reduce the overall thickness or coefficient of consolidation of the most compressible materials.

TABLE 5 – SETTLEMENT SUMMARY	
Thickness of Fill Placed (feet)	**Calculated Settlement (inches)**
2.5	0.3 – 0.4
5.0	0.6 – 0.9
7.5	1.3 – 2.2
10.0	2.3 – 4.0

Settlement can be interpolated between the fill thickness intervals listed on Table 5. Where there is 7.5 feet or greater thickness of fill placed, the settlement estimate includes as assumed increase for secondary (creep) settlement. The increase in the range of calculated settlement for fill thickness greater than 5 feet includes both primary and secondary settlement (about 0.5 inches of settlement added after 30 years).

Clays deposits that are 5-, 10-, 15- and 20-feet thickness soft clay layers are estimated to take around 1, 5, 11, and 20 months respectively to result in 50 percent of the consolidation settlement. Settlement to less than 50 percent consolidation occurs more rapidly, however settlement beyond 50 percent consolidation slows down considerably. Several of the borings indicated there are interbedded silty sands or sand layers in the lacustrine deposits below 15 feet depth which would decrease the drainage path and increase the time-rate to complete consolidation.

Options to limit settlement on this site would include limiting the thickness of fill placed for construction. It is assumed that a lightly-loaded single-story building would have distributed loading of the deeper soil layers that is roughly equivalent to placement of one foot of fill. Buried structures and tanks would theoretically decrease the weight of existing fill and soil, and would not increase the predicted settlement. The high mast sign is also assumed to have loads that are distributed over considerable width and would not increase settlement potential.

Settlement could be decreased by placing the fill and then have a holding and monitoring period so that settlement occurs before the building is constructed. The estimated settlement time rate is provided to 50 percent consolidation, so that after 1 to 20 months, only half of the settlement on Table 5 would remain after that time.

Settlement could be further decreased by preloading with heavier fill layers at the proposed structures, and then removing the fill just prior to building the structures. If a structure is to be built on 6.5 feet of fill and imposes a load of 1 foot of fill, the settlement is anticipated to be 1.3 to 2.2 inches (7.5 feet total fill thickness on Table 5). If a permanent fill of 6.5 feet and a temporary fill 4 feet thick is added (10 feet of fill loading), it will cause settlement of 1.2 to 2 inches during the 20-month period to 50 percent consolidation (half of the total predicted settlement). Once this fill is removed, all of the originally-anticipated settlement has been accomplished an no further settlement would be expected. Heavier preloading fills will require less than 50 percent consolidation to achieve effective pre-consolidation.

5.5 Foundations

Spread Footings

It is expected that the project will involve footings to support:

- a conventional single-story store structure (with sustained dead (plus snow) loading in the range of 1 to 3 kips per lineal foot for strip footings and 10 to 20 kips for square column footings maximum) that will be supported within 2 feet of the final ground surface.
- canopy structures which may have 10 to 30 kips vertical dead plus snow load of 10 to 30 kips plus significant short-duration overturning loads or moment loading for wind or seismic conditions, within about 2 to 3 feet of the final ground surface (or more depth as necessary for uplift loading or to clear gas station utilities)
- various buried tank, environmental or fuel vaults, assumed to not exceed 8 to 10 feet depth which will be lightly loaded, and the load will largely be compensated for by buried of the footings or slabs at considerable depth. If the tanks are above-ground, the bearing capacity will be the same as for the store structure
- a high-mast sign which will consist of 1 or 2, 50- to 100-foot-high columns which will have 50 kips long-term loading on a mat foundation but will be subject to considerable wind or seismic overturning loads of very short duration. Alternatively, a deep foundation may be considered.

The most economical method of foundation support lies in spread footings bearing on at least 2 feet of compacted structural fill in areas of fat clay or on at least 2 feet of granular native soil. The bottom of footing excavations should be recompacted to at least 90 percent relative compaction and should be firm and unyielding.

Store foundations designed and constructed in accordance with the recommendations of this geotechnical report, within 2 feet of final grade, may be designed for a net allowable soil bearing pressure of 2,000 pounds per square foot for dead plus long-term live loads. The allowable soil bearing pressure was calculated using a minimum foundation width of 24 inches and an embedment depth of 18 inches. The allowable bearing pressure value may be increased by one-third for total loading conditions, including wind and seismic forces. The allowable bearing pressure is a net value; therefore, the weight of the foundation and backfill may be neglected when computing dead loads.

Canopy footings may similarly be designed for the same bearing pressures as the store footings, if they are not more than 4 feet below the existing ground surface. Greater depth of footings may be desirable to provide overturning resistance.

Footings at more than 4 feet below existing ground surface should not exceed 1,500 pounds per square foot allowable bearing pressure, due to softer clays possibly present at that depth. The allowable bearing pressure value may be increased by one-third for total loading conditions, including wind and seismic forces. The allowable bearing pressure is a net value; therefore, the weight of the foundation and backfill may be neglected when computing dead loads. Since the excavations may fill with perched groundwater after the site is completed (due to being surrounded by low-permeability clays), buried tanks should be designed to resist uplift when empty.

The high-mast sign should have a footing buried 4 feet or more existing ground surface may be designed for an allowable bearing pressure of 1,000 psf for long-term sustained loads but should be designed for short-term (wind and seismic loading) for a maximum bearing pressure of 3,000 pounds per square foot. Depending on the amount of differential settlement of the footings, a tilt could develop in the high-mast sign, therefore it is advisable that the nuts and steel on the tower base can be accessed, and the sign can be adjusted at a later date. Jacking pockets for both lowering and raising

the corners of the tower should be considered so that the sign can be adjusted without a crane supporting the tower.

Exterior foundations should be embedded a minimum of 24 inches below lowest adjacent exterior finish grade for frost protection and confinement. Interior footings should be bottomed at least 12 inches below lowest adjacent finish grade for confinement. Wall foundation dimensions should satisfy the requirements listed in the latest edition of the California Building Code.

Uplift on footings can be resisted by either total weight of the concrete foundation or total weight of soil overburden and concrete (to save on concrete). Unit weight of permeable gravel such as drain rock is estimated to be 110 pounds per cubic foot (pcf). Unit weight of structural fill or ¾-inch aggregate base compacted to 90 percent relative density can be assumed to be 125 pcf.

Resistance to lateral loads may be calculated using an allowable passive equivalent fluid unit weight of 350 pounds per cubic foot or an allowable coefficient of friction of 0.45 applied to vertical dead loads. The recommended coefficient of base friction is 0.45, which has been reduced by a factor of 1.5 on the ultimate sliding resistance. Both passive and frictional resistances may be assumed to act concurrently.

To account for overturning, the design bearing pressure including overturning or load eccentricity may consider the bearing pressure over effective footing width and length, B* and L* where:

$$B^* = B - 2 * e_B \quad ; \qquad L^* = L - 2 * e_L$$

Where B and L are the actual footing width and length, and e_B and e_L are the eccentricity of the load in length offset from the centerline of the footings. This method generally gives lower maximum applied pressures than computing the maximum edge load under trapezoidal or triangular loading.

RTGA requests the opportunity to review the draft or final footing sizes and depth, and the applied loading, to confirm that the proposed recommendations are properly sized for the appropriate bearing capacity. Differing loading conditions or differing depth or geometry may require modification of the allowable bearing pressure recommendations.

Prior to placing steel or concrete, footing excavations should be cleaned of all debris, lose or soft soil, and water. Any loose soil in the bottom of footing excavations should be recompacted to at least 92 percent relative compaction or removed to expose firm, unyielding material. All footing excavations should be observed by the project soils engineer just prior to placing steel or concrete to verify the recommendations contained herein are implemented during construction.

Alternative Foundations

Deep foundations could potentially be used for the high mast sign, including either a 2- to 3-foot diameter cast-in-place drilled shaft or a pile group with several 10-inch-square precast concrete piles. Both pile types will have comparable compressive resistance, the main choice is whether the high mast sign moments are developed in bending in a single drilled shaft, or by the action of a couple (one pile in compression, one in uplift) between four or more vertical or battered piles. Axial capacities of 2-foot-diameter and 10-inch square prestressed precast concrete piles are summarized on Plate 22. The axial compressive capacity of 3-foot-diameter drilled shafts can be obtained by multiplying the capacity for a 2-foot-diameter pile by 1.5. If the piles are only 10 to 15 feet long, the pile capacity can be supported in the crust above the soft clay layer, however they will potentially be subject to the same differential settlement as would occur for shallow foundations; the amount of differential settlement could be worse because the compressive loads would be carried far deeper than the compressive load from a spread footing, resulting in more settlement of the clays. Alternatively, axial capacity can be developed below 35 to 38 feet depth which will include down-drag on the portion of the piles above this depth due to potential settlements.

If drilled shafts or piles are utilized, a separate lateral pile analysis would be required to assess the amount of lateral movement of the foundation under lateral loading, which is not included in the current scope.

5.6 Short Retaining Walls

Short retaining walls less than 6 feet tall, including loading docks foundations with imbalanced ground levels, utility vaults/sumps, should be designed to resist the lateral earth pressure exerted by the retained, compacted backfill plus any additional lateral force that will be applied to the wall due

to surface loads placed at or near the wall. The following table presents a list of recommended soil parameters for the design of these small retaining structures of less than 6 feet in height assuming vertical back faces and a level backfill.

TABLE 6 – LATERAL EARTH PRESSURES	
Earth Pressure	**Equivalent Fluid Density**
Active	30 pcf
At-rest	50 pcf
Seismic Active Pressure	50 pcf
Allowable Passive	250 pcf
Allowable Coefficient of Friction	0.45

The at-rest earth pressure is applicable for braced walls that are restrained at the top, including building walls or vaults. Fifty percent of any uniform area surcharge placed at the top of a restrained wall may be assumed to act as a uniform horizontal pressure over the entire height of the wall. Where rotational movement is possible, the active earth pressure applies. Thirty percent of any uniform surcharge placed at the top of a non-restrained wall may be assumed to act as a uniform horizontal pressure over the entire height of the wall. The seismic active pressure, if larger than the at-rest pressure, applies to both active- and at-rest walls during earthquake conditions.

The above values are for horizontal backfill and do not include hydrostatic pressures that might be caused by groundwater or surface water trapped behind a structure. Therefore, wall backfill should be free draining and provisions should be made to collect and dispose of excess water that may accumulate behind earth retaining structures.

5.7 Concrete Slab-on-Grade Construction

The upper 24 inches of subgrade for concrete or asphalt pavements or concrete slab-on-grade floors should be prepared so that soils are non-expansive, including either placing a structural fill pad, or over-excavation of clays and replacement with structural fill if the grade change is less than 2 feet. The thickness of aggregate base and subbase materials can be included in the thickness of non-expansive materials below the base of concrete or bound asphalt layers. Prior to constructing concrete

slabs, walkways, or other flatwork, the upper 12 inches of slab subgrade should be scarified, uniformly moisture conditioned to within 2 percent of optimum moisture content, and uniformly compacted to at least 90 percent relative compaction.

Interior concrete floor slabs should have a minimum thickness of four inches. Slab thickness and structural reinforcing requirements within the slab should be determined by the design engineer. At least four inches of Type 2 aggregate base should be placed beneath slab-on-grade floors to provide uniform support. The aggregate base should be compacted to a minimum of 95 percent relative compaction. The subgrade should be protected against drying until the concrete slab is placed.

In floor slab areas where moisture-sensitive floor coverings are planned, an impermeable membrane (e.g., 15-mil Stego wrap or approved alternate) should be installed to reduce the migration of moisture vapor through the concrete slabs. Installation should conform to the specifications provided for a Class B vapor restraint (ASTM E 1745 and 1643).

5.8 Pavement Sections

Most of the site has surface soils which are fat clay, which has an assumed R-value of 3 or California Bearing Ratio of 2 (depending on the design method). The upper 24 inches of subgrade for concrete or asphalt pavements or concrete slab-on-grade floors should be prepared so that soils are non-expansive, including either placing a structural fill pad, or over-excavation of clays and replacement with structural fill if the grade is raised less than 2 feet above native soil. The thickness of aggregate base and subbase materials can be included in the thickness of non-expansive materials below the base of concrete or bound asphalt layers.

Pavement section recommendations have not been included in this report at this time because we have not been provided design truck loading values with which to make a recommendation. These recommendations will be provided in a later report, once the loading has been provided, and assuming that RTGA will have some discussion with Love's regarding their preferred methods of ground modification, if any.

Based on our experience, environmental aspects, such as freeze-thaw cycles and thermal cracking will probably govern the life of AC pavements. Thermal cracking of the asphalt pavement allows more water to enter the pavement section, which promotes deterioration and increases maintenance costs. Pavement maintenance including cracking sealing is typically required at 5 to 10 years age to provide for the 20- to 30-year pavement design life.

5.9 Corrosion

Analytical testing was conducted on a representative near-surface soil sample obtained from borehole B-4 to assess the potential for adverse reactivity with concrete and corrosivity with steel. The tested soil sample indicated non-detection for sulfate and chloride contents, a mild resistivity (12,000 ohm-cm), and a slightly basic pH (8.32). Hence, Type I-II cement may be used in concrete for this project. The resistivity value indicates a mild corrosive potential for ferrous metals in direct contact with on-site soils. Therefore, special corrosion mitigation measures such as cathodic protection may be implemented for buried steel pipes and helical piers but are not required. The test results are presented on Plate 21.

5.10 Site Drainage and Moisture Protection

Final elevations at the site should be planned so that drainage is directed away from all foundations. A system of roof gutters and drains is recommended to collect the roof drainage and direct it away from foundations unless pavement extends to the walls. No water ponding should be allowed within five feet of the building perimeter. Any surface water should be re-routed and directed to non-sensitive areas away from the building.

Negligible infiltration rates are anticipated on most of the site, as tested at percolation test P-1 through P-3 and based on soil exposed in most typical borings. However, it may be feasible to establish infiltration basins at the northeast edge of the site due to more permeable soils in that area (as encountered in Borings B-05 and B-06).

5.11 Erosion and Sediment Control

Erosion potential is dependent on numerous factors including grain size distribution, cohesion, moisture content, slope angle, and the velocity of the water or wind on the ground surface. Erosion

and sediment control should be incorporated in construction and post-construction phase planning. In general, all runoff should be temporarily directed around construction sites. Temporary control measures designed to be effective during construction should be maintained through the course of the work. When necessary, these measures may be left in place along with permanent measures during post construction period until effective landscaping or revegetation has been established. Permanent vegetation consisting of native species should be established where possible and natural vegetation should be protected and retained where possible. Clayey topsoil and natural organic debris should be stockpiled for use in revegetation or removed from site.

There are no major cut or fill slopes planned for this project. Dust potential at this site will be moderate during dry periods. Temporary (during construction) and permanent (after construction) erosion control will be required for all disturbed areas. The contractor shall prevent dust from being generated during construction in compliance with all applicable city, county, state, and federal regulations. The contractor shall submit an acceptable dust control plan to Lassen County prior to starting site preparation or earthwork. Project specifications should include an indemnification by the contractor of the owner and engineer for any dust generation during the construction period. The owner will be responsible for mitigation of dust after accepting the project.

To minimize erosion and downstream impacts to sedimentation from this site, best management practices with respect to storm water discharge should be implemented at this site.

6.0 ADDITIONAL SERVICES

6.1 Plan Review, Construction Observation, and Testing

We recommend that RTGA conduct a general review of the project plans, including subsurface drainage systems and specifications to verify our earthwork and foundation recommendations have been properly interpreted and implemented during design. In addition, the recommendations made in this report assume that an adequate program of tests and observations will be made during construction to verify compliance with these recommendations. These tests and observations should include, but not necessarily be limited to, the following:

- Observations and testing during site preparation and earthwork;
- Observations and testing during structural fill compaction;
- Observation during pile or drilled shaft installation;
- Observation and testing of construction materials (concrete, steel and wood); and
- Consultation as may be required during construction.

Additional information concerning the scope and cost of these services can be obtained from our office.

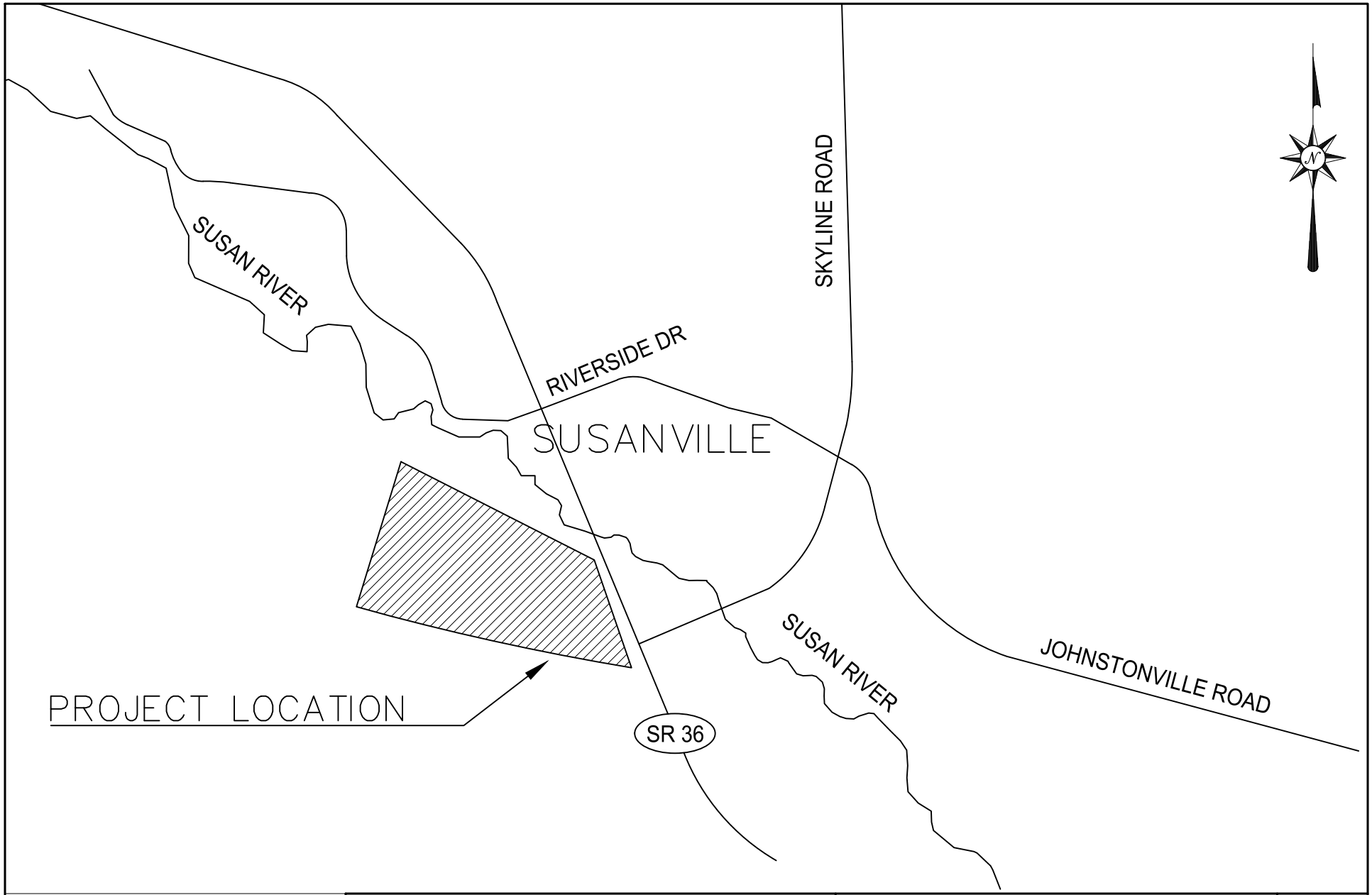
7.0 LIMITATIONS

Recommendations contained in this report are based on our field exploration, and our understanding of the proposed construction. This report has been prepared for design purposes for specific application to the currently proposed subject project in accordance with the generally accepted standards of practice at the time the report was written. No warranty, expressed or implied, is made.

The analyses and recommendations submitted are based on the field exploration performed at the locations shown on Plate 2 of this report. This report may not reflect the soil variations that may be encountered during construction. Therefore, further evaluation of site conditions may be warranted during construction.

If the scope of the proposed construction changes from those described, our recommendations should be reviewed by us and may require modification. All parties to the project including the designer, contractor, subcontractors, etc., should be made aware of this report in its entirety. The use of information contained in this report for bidding purposes should be done at the Contractor's option and risk.

PLATES



Not To Scale

Adapted from Lane Engineers Inc., 2021

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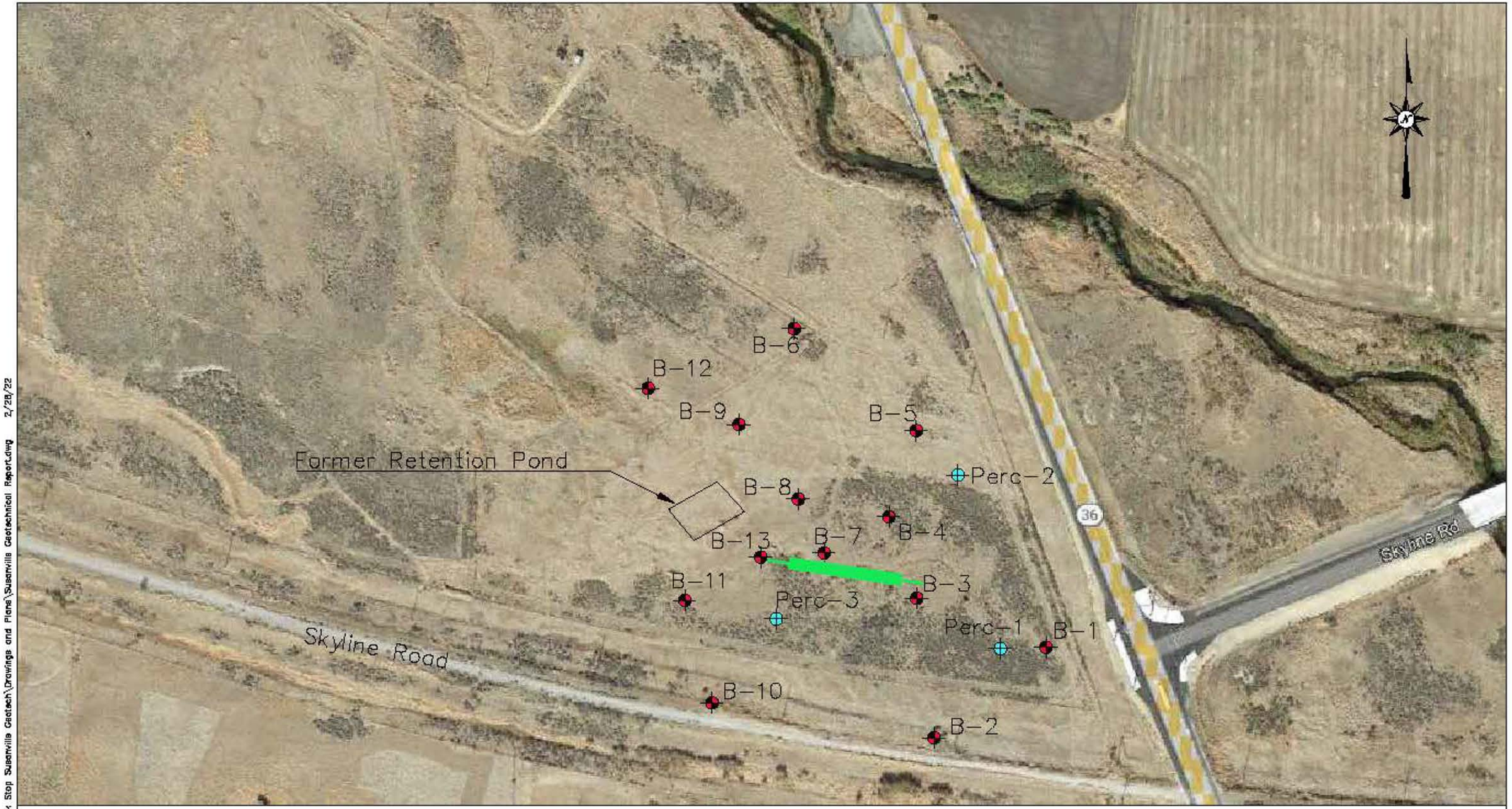
PROJECT LOCATION

GEOTECHNICAL INVESTIGATION REPORT
LOVES TRAVEL STOP
SUSANVILLE

LASSEN COUNTY CALIFORNIA

PLATE 1

J:\2021\21166.001 – Love's Truck Stop Susanville Geotech\Drawings and Plans\Susanville Geotechnical Report.dwg 2/28/22



Approximate Borehole Location

Approximate Percolation Test Location

Approximate ReMi Line Location
Thick Portion Shows Extent of 2-D Modeling

0 200 400

SCALE: 1"= 200'

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SITE MAP

GEOTECHNICAL INVESTIGATION REPORT
LOVES TRAVEL STOP
SUSANVILLE

LASSEN COUNTY CALIFORNIA

PLATE 2

J:\2021\21165.001 - Love's Truck Stop Susanville Geotech\Drawings and Plans\Susanville Geotechnical Report.dwg 2/28/22

LOG OF BORING B-01

LOCATION SEE LOCATION MAP

EQUIPMENT CME-55

ELEVATION _____ DATE 1/13/22

LABORATORY TESTS	FIELD BLOWS /6in	BLOWS/FT	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DEPTH (ft)	SAMPLE	
					0		**BLACK FAT CLAY (CH)** organics and snow cover in top 1 foot, moist, high plastic, very stiff, some organics and roots (10YR 2/1) (est.0% G/ 13% S/ 87% F)
Percent Passing #200 = 87% Liquid Limit = 56 Plasticity Index = 35	8 10 11	21	44.4	85.4	2 4		PP Su=2.5 ksf
	2 5 7	12			6		stiff
	8 7 9	16			8		**DARK BROWN CLAYEY SAND (SC)** slightly moist, medium dense, medium plasticity silt, fine sand (7.5YR 3/4) (est.0% G/ 75% S/ 25% F)
SA, Percent Passing #200 =37% Liquid Limit = 33 Plasticity Index = 11	4 4 5	9	18.3		10 12		loose
	5 6 4	10			14		**BROWN SILTY SAND (SM)** slightly moist, medium dense, non-plastic, fine sand (7.5YR 4/3) (est.0% G/ 85% S/ 15% F)
	2 2 1	3			16 18		**DARK REDDISH GRAY FAT CLAY WITH SAND (CH)** slightly moist, soft, medium to highly plastic, PP Su=1.0 ksf (2.5YR 4/1)
	2 2 3	5	54.0 48.0	78.3	20 22		**DARK GRAY FAT CLAY WITH SAND (CH)** saturated, soft to firm, medium to highly plastic, PP Su=0.5 ksf (7.5YR 4/1) (est.0% G/ 15% S/ 85% F)
)					24		very soft layer, sampler sank with no blows

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LOG OF BORING B-01

GEOTECHNICAL INVESTIGATION
LOVE'S TRAVEL STOP & COUNTRY STORES INC.
SUSANVILLE
LASSEN COUNTY CALIFORNIA

PLATE 3

1 LOG LETTER SIZE GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 2/28/22

LOG OF BORING B-01

LOCATION SEE LOCATION MAP

EQUIPMENT CME-55

ELEVATION _____ DATE 1/13/22

LABORATORY TESTS	FIELD BLOWS /6in	BLOWS/FT	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DEPTH (ft)	SAMPLE	
	0 0 0	0	53.0		26		**DARK GRAY FAT CLAY WITH SAND (CH)** saturated, soft to firm, medium to highly plastic, PP Su=0.5 ksf (7.5YR 4/1) (est.0% G/ 15% S/ 85% F) *(continued)*
					28		**DARK GRAY CLAYEY SAND (SC)** saturated, firm to loose, medium to high plasticity (7.5YR 4/1) (est.0% G/ 67% S/ 33% F)
Percent Passing #200 = 33% Liquid Limit = 33 Plasticity Index = 9	5 5 10	15	51.0	87.0	30		
					32		
					34		
	8 16 40	56			36		**DARK GRAY POORLY GRADED SAND (SP)** saturated, very dense, non-plastic, coarse to fine sand (10YR 4/1) (est.0% G/ 95% S/ 5% F)
					38		
					40		REFUSAL DUE TO HEAVE @ 40' Heaving Sand
					42		
					44		
					46		
					48		
)					50		

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LOG OF BORING B-01

GEOTECHNICAL INVESTIGATION
LOVE'S TRAVEL STOP & COUNTRY STORES INC.
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PLATE 3

1 LOG LETTER SIZE GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 2/28/22

LOG OF BORING B-02

LOCATION SEE LOCATION MAP

EQUIPMENT CME-55

ELEVATION _____ DATE 1/13/22

LABORATORY TESTS	FIELD BLOWS /6in	BLOWS/FT	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DEPTH (ft)	SAMPLE	
					0		**BLACK SANDY FAT CLAY (CH)** organics in top one foot, moist, very stiff to hard, medium plasticity, wet due to snow cover, PP Su=2.5 ksf (10YR 2/1) (est.0% G/ 45% S/ 55% F)
	3 3 6	9	29.8		2		
					4		
	8 9 10	19			6		very stiff
	3 4 5	9			8		**DARK BROWN SILT (ML)** slightly moist, stiff, medium plasticity silt, (7.5YR 3/4) (est.0% G/ 43% S/ 57% F)
SA, Percent Passing #200 =57%	3 5 6	11	27.3		10		
					12		TERMINATED @ 11.5' No Free Water Observed
					14		
					16		
					18		
					20		
					22		
					24		

)

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LOG OF BORING B-02

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LASSEN COUNTY CALIFORNIA

PLATE 4

1 LOG LETTER SIZE GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 2/28/22

LOG OF BORING B-03

LOCATION SEE LOCATION MAP

EQUIPMENT CME-55

ELEVATION _____ DATE 1/12/22

LABORATORY TESTS	FIELD BLOWS /6in	BLOWS/FT	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DEPTH (ft)	SAMPLE	
					0		**DARK BROWN SILTY SAND (SM)** organics in top 1 foot, slightly moist, medium dense, medium plasticity silt (7.5YR 3/4) (est.0% G/ 65% S/ 35% F)
	4 4 10	14			2		
					4		
	8 10 11	21	27.4	92.9	6		**REDDISH BROWN FAT CLAY WITH SAND (CH)** slightly moist, hard, medium plasticity clay, PP Su=4.0 ksf (2.5YR 4/3) (est.0% G/ 25% S/ 75% F)
	5 5 8	13			8		hard, PP Su=4.0 ksf
					10		**DARK BROWN SANDY FAT CLAY (CH)**
	3 4 7	11	34.1	95.1			moist, stiff, medium plasticity, fine sand, PP Su=2.5 ksf (7.5YR 3/4) (est.0% G/ 45% S/ 55% F)
					12		
					14		
	2 3 2	5			16		**REDDISH BROWN FAT CLAY WITH SAND (CH)** moist, firm, high to medium plasticity (2.5YR 4/3) (est.0% G/ 25% S/ 75% F)
					18		
					20		
	3 4 6	10	58.1	85.3			**DARK GRAY SANDY FAT CLAY (CH)** saturated, firm, highly plastic, PP Su=1.5 ksf (7.5YR 4/1) (est.0% G/ 40% S/ 60% F)
					22		TERMINATED @ 21.5'
							Grouted and backfilled
					24		

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LOG OF BORING B-03

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LASSEN COUNTY CALIFORNIA

PLATE 5

1 LOG LETTER SIZE GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 2/28/22

LOG OF BORING B-04

LOCATION SEE LOCATION MAP

EQUIPMENT CME-55

ELEVATION _____ DATE 1/12/22

LABORATORY TESTS	FIELD BLOWS /6in	BLOWS/FT	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DEPTH (ft)	SAMPLE	
					0		**DARK BROWN SANDY LEAN CLAY (CL)** organics in top 1 foot, moist, firm to stiff, highly to medium plasticity clay, PP Su=1.0 ksf (7.5YR 3/4) (est.0% G/ 45% S/ 55% F)
Corrosion Testing pH: 8.32 Chloride: Not Detected Sulfate: Not Detected Resistivity: 12,000 ohms-cm	3 2 4	6			2		PP Su=1.0 ksf
Liquid Limit = 40 Plasticity Index = 20	4 5 6	11	27.4	97.0	4		PP Su=2.5 ksf stiff
	3 4 5	9			6		PP Su=1.75 ksf
	4 5 7	12			8		**DARK BROWN SILTY SAND (SM)** slightly moist, medium dense, medium plasticity silt, fine sand, PP Su=2.0 ksf (7.5YR 3/4) (est.0% G/ 65% S/ 35% F)
	2 1 1	2	45.2		10		**REDDISH BROWN SANDY FAT CLAY (CH)** slightly moist soft, medium plasticity clay, PP Su=1.5 ksf (2.5YR 4/3) (est.0% G/ 40% S/ 60% F)
	3 3 2	5	55.9	81.6	12		
					14		
					16		
					18		
					20		TERMINATED @ 21.5'
					22		Grouted and backfilled
					24		

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LOG OF BORING B-04

GEOTECHNICAL INVESTIGATION
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PLATE 6

1 LOG LETTER SIZE GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 2/28/22

LOG OF BORING B-05

LOCATION SEE LOCATION MAP

EQUIPMENT CME-55

ELEVATION _____ DATE 1/12/22

LABORATORY TESTS	FIELD BLOWS /6in	BLOWS/FT	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DEPTH (ft)	SAMPLE	
					0		**YELLOWISH BROWN SILTY SAND (SM)** organics in top 1 foot, slightly moist, medium dense, non-plastic (10YR 5/6) (est.0% G/ 85% S/ 15% F)
	5 8 8	16			2		
					4		
	5 5 5	10			6		
					8		**DARK BROWN SILTY SAND (SM)** slightly moist, medium dense, medium plasticity silt, fine sand (7.5YR 3/4) (est.0% G/ 65% S/ 35% F)
	8 8 11	19			10		
	4 4 6	10			12		
					14		
	2 3 3	6			16		**REDDISH BROWN FAT CLAY WITH INTERBEDDED THIN SAND LAYERS (CH)** slightly moist, soft to firm, medium plasticity clay, PP Su=1.0 ksf (2.5YR 4/3)
					18		
Percent Passing #200 = 50% Liquid Limit = 36 Plasticity Index = 16			37.0	83.1	20		**DARK GRAY SANDY FAT CLAY (CH)** saturated, soft to firm, highly plastic, PP Su=1.5 ksf (7.5YR 4/1) (est.0% G/ 50% S/ 50% F)
					22		DARK GREY CLAYEY SAND (SC) (est.0% G/ 80% S/ 20% F) TERMINATED @ 22.5' Grouted and backfilled
					24		

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LOG OF BORING B-05

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PLATE 7

LOG OF BORING B-06

LOCATION SEE LOCATION MAP

EQUIPMENT CME-55

ELEVATION _____ DATE 1/12/22

LABORATORY TESTS	FIELD BLOWS /6in	BLOWS/FT	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DEPTH (ft)	SAMPLE	
					0		**BROWN POORLY GRADED SAND (SP)** organics in top 1 foot, slightly moist, loose to medium dense, non-plastic fines, coarse to fine sand (7.5YR 4/3) (est.0% G/ 97% S/ 3% F)
	2 3 4	7			2		
					4		
SA, Percent Passing #200 =3%	7 8 12	20	6.2	98.4	6		
	9 14 9	23			8		medium dense
	3 8 11	19			10		grades siltier
					12		TERMINATED @ 11.5' No Free Water Observed
					14		
					16		
					18		
					20		
					22		
					24		

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LOG OF BORING B-06

GEOTECHNICAL INVESTIGATION
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PLATE
8

LOG OF BORING B-07

LOCATION SEE LOCATION MAP

EQUIPMENT CME-55 (MUD ROTARY DRILLING)

ELEVATION _____ DATE 1/12/22

LABORATORY TESTS	FIELD BLOWS /6in	BLOWS/FT	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DEPTH (ft)	SAMPLE	
					0		**DARK BROWN SANDY FAT CLAY (CH)** organics and snow cover in top 1 foot, very moist, very stiff, high to medium plasticity clay, PP Su=2.0 ksf (7.5YR 3/4) (est.0% G/ 45% S/ 55% F)
	5 6 11	17			2		
					4		
	7 10 12	22			6		**DARK BROWN SILTY SAND (SM)** slightly moist, medium dense, medium plasticity silt, fine sand (7.5YR 3/4) (est.0% G/ 65% S/ 35% F)
	8 12 17	29			8		
					10		**REDDISH BROWN FAT CLAY (CH)** slightly moist, stiff, high plasticity clay, PP Su=3.0 to 4.0 ksf (2.5YR 4/3) (est.0% G/ 25% S/ 75% F)
	4 6 8	14			12		
	4 7 9	16			14		**YELLOWISH BROWN SILTY SAND (SM)** slightly moist, medium dense, non-plastic (10YR 5/6) (est.0% G/ 85% S/ 15% F)
SA, Percent Passing #200 =86%	3 2 3	5	44.8		16		**REDDISH BROWN FAT CLAY (CH)** slightly moist, firm, high plasticity clay, PP Su=1.5 to 2.0 ksf (2.5YR 4/3) (est.0% G/ 14% S/ 86% F) mud rotary dirlling starts at 15.5 ft
					18		
Liquid Limit = 54 Plasticity Index = 30 Consolidation Moisture Content=52.0% Dry Density=71.4 pcf	2 3 2	5	20.9	92.1	20		**FAT CLAY WITH SAND (CH)** wet, soft, high plasticity, PP Su=<0.5 ksf (est.0% G/ 20% S/ 80% F)
					22		
					24		

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LOG OF BORING B-07

GEOTECHNICAL INVESTIGATION
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PLATE 9

1 LOG LETTER SIZE GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 2/28/22

LOG OF BORING B-07

LOCATION SEE LOCATION MAP

EQUIPMENT CME-55 (MUD ROTARY DRILLING)

ELEVATION _____ DATE 1/12/22

LABORATORY TESTS	FIELD BLOWS /6in	BLOWS/FT	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DEPTH (ft)	SAMPLE	
	1 1 2	3	59.9		26		**FAT CLAY WITH SAND (CH)** wet, soft, high plasticity, PP Su=<0.5 ksf (est.0% G/ 20% S/ 80% F) *(continued)*
					28		
					30		
	3 2 2	4	68.1	78.4			PP Su=<0.5 ksf
					32		TERMINATED @ 31.5' Grouted and backfilled No Free Water Observed
					34		
					36		
					38		
					40		
					42		
					44		
					46		
					48		
					50		

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LOG OF BORING B-07

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PLATE 9

1 LOG LETTER SIZE GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 2/28/22

LOG OF BORING B-08

LOCATION SEE LOCATION MAP

EQUIPMENT CME-55

ELEVATION _____ DATE 1/11/22

LABORATORY TESTS	FIELD BLOWS /6in	BLOWS/FT	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DEPTH (ft)	SAMPLE	
	5 11 17	28			0 2 4		**DARK BROWN FAT CLAY WITH SAND (CH)** organics in top 1 foot, slightly moist, very stiff, medium to highly plastic, PP Su=2.0 ksf (7.5YR 3/4) (est.0% G/ 25% S/ 75% F)
	6 6 8	14			6		**DARK BROWN SILTY SAND (SM)** slighly moist, medium dense, low plasticity silt, fine sand (7.5YR 3/4) (est.0% G/ 65% S/ 35% F)
	6 7 9	16			8		
					10 12 14		**REDDISH BROWN SANDY SILT (ML)** slightly moist, medium plasticity, slightly dilative, PP Su=1.5 ksf (2.5YR 4/3) (est.0% G/ 40% S/ 60% F)
	2 2 3	5			16		**VERY DARK GREY FAT CLAY WITH SAND (CH)** moist, firm, highly plastic, PP Su=1.5 ksf (est.0% G/ 20% S/ 80% F)
	2 3 3	6			18 20		no recovery
					22 24		TERMINATED @ 21.5' Grouted and backfilled

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LOG OF BORING B-08

GEOTECHNICAL INVESTIGATION
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PLATE 10

1 LOG LETTER SIZE GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 2/28/22

LOG OF BORING B-09

LOCATION SEE LOCATION MAP

EQUIPMENT CME-55

ELEVATION _____ DATE 1/11/22

LABORATORY TESTS	FIELD BLOWS /6in	BLOWS/FT	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DEPTH (ft)	SAMPLE	
					0		**DARK BROWN SANDY FAT CLAY (CH)** organics and snow cover in top 1 foot, moist, very stiff, high plasticity clay, PP Su=3.0 ksf (7.5YR 3/4) (est.0% G/ 40% S/ 60% F)
	3 7 10	17			2		
					4		
	8 10 14	24			6		**DARK BROWN FAT CLAY (CH)** slightly moist, stiff, medium to high plasticity clay, PP Su=4.5 ksf (7.5YR 3/4) (est.0% G/ 10% S/ 90% F)
	4 4 7	11			8		**DARK BROWN SANDY FAT CLAY (CH)** slightly moist, stiff, medium to highly plastic clay, PP Su=2.5 ksf (7.5YR 3/4) (est.0% G/ 35% S/ 65% F)
	4 2 3	5			10		more sandy and firm, PP Su=2.5 ksf (est.0% G/ 40% S/ 60% F)
					12		
					14		
	4 3 3	6			16		**DARK GRAY FAT CLAY WITH SAND (CH)** wet, firm, highly plastic silt, PP Su=0.5 to 1.5 ksf (2.5Y 4/1) (est.0% G/ 25% S/ 75% F)
					18 ▼		
	3 4 5	9			20		saturated, more sandy and stiff, PP Su=0.5 ksf (est.0% G/ 20% S/ 80% F)
					22		TERMINATED @ 18' Grouted and backfilled
					24		

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LOG OF BORING B-09

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PLATE 11

1 LOG LETTER SIZE GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 2/28/22

LOG OF BORING B-10

LOCATION SEE LOCATION MAP

EQUIPMENT CME-55

ELEVATION _____ DATE 1/13/22

LABORATORY TESTS	FIELD BLOWS /6in	BLOWS/FT	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DEPTH (ft)	SAMPLE	
	3 5 5	10			0 2 4		**DARK BROWN FAT CLAY (CH)** organics up to 1 foot, moist, stiff, medium plasticity, PP Su=3.0 ksf (7.5YR 3/4) (est.0% G/ 45% S/ 55% F)
	3 6 7	13			6		
	6 7 7	14			8		**DARK BROWN SILTY SAND (SM)** slightly moist, medium dense, medium plasticity silt (7.5YR 3/4) (est.0% G/ 65% S/ 35% F)
	6 8 10	18			10		**REDDISH BROWN FAT CLAY WITH SAND (CH)** slightly moist, very stiff, medium plasticity, PP Su=4.0 ksf (2.5YR 4/3)
					12		TERMINATED @ 11.5' No Free Water Observed
					14 16 18 20 22 24		

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LOG OF BORING B-10

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PLATE 12

1 LOG LETTER SIZE GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 2/28/22

LOG OF BORING B-11

LOCATION SEE LOCATION MAP

EQUIPMENT CME-55

ELEVATION _____ DATE 1/11/22

LABORATORY TESTS	FIELD BLOWS /6in	BLOWS/FT	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DEPTH (ft)	SAMPLE	
	2 2 2	4			0		**DARK BROWN SILTY SAND (SM)** moist due to snow melt, loose, low plasticity silt, fine sand (7.5YR 3/4) (est.0% G/ 65% S/ 35% F)
					2		
					4		
	6 6 4	10			6		**DARK BROWN POORLY GRADED SAND (SP)** moist, loose to medium dense, non-plastic (7.5YR 3/4) (est.0% G/ 95% S/ 5% F)
							DARK BROWN FAT CLAY WITH SAND (CH) saturated, stiff, high plasticity clay, groundwater likely perched on clay layers below, PP Su=1.0 ksf (7.5YR 3/4) (est.0% G/ 25% S/ 75% F)
	3 3 4	7			8		**DARK BROWN SANDY FAT CLAY (CH)** saturated, firm, high plasticity clay, PP Su=0.5 ksf (7.5YR 3/4) (est.0% G/ 40% S/ 60% F)
					10		
	2 2 2	4					firm to soft, PP Su=0.5 ksf
					12		TERMINATED @ 11.5' Grouted and backfilled
					14		
					16		
					18		
					20		
					22		
					24		

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LOG OF BORING B-11

GEOTECHNICAL INVESTIGATION
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PLATE 13

1 LOG LETTER SIZE GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 2/28/22

LOG OF BORING B-12

LOCATION SEE LOCATION MAP

EQUIPMENT CME-55

ELEVATION _____ DATE 1/12/22

LABORATORY TESTS	FIELD BLOWS /6in	BLOWS/FT	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DEPTH (ft)	SAMPLE	
					0		**DARK BROWN FAT CLAY (CH)** organics up to 1 foot, moist, stiff, high to medium plasticity, very fine sand, PP Su=1.5 ksf (7.5YR 3/4) (est.0% G/ 45% S/ 55% F)
	4 4 5	9			2		
					4		
	7 15 20	35			6		hard, PP Su=4.5 ksf
					8		**DARK BROWN SILTY SAND (SM)** slightly moist, medium dense, medium plasticity silt, non-plastic (7.5YR 3/4) (est.0% G/ 65% S/ 35% F)
	6 7 9	16			10		**REDDISH BROWN FAT CLAY WITH SAND (CH)** slightly moist, very stiff, medium plasticity clay, PP Su=4.5 ksf (2.5YR 4/3) (est.0% G/ 25% S/ 75% F)
	6 7 11	18			12		TERMINATED @ 11.5'
							No Free Water Observed
					14		
					16		
					18		
					20		
					22		
					24		

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LOG OF BORING B-12

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PLATE 14

1 LOG LETTER SIZE GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 2/28/22

LOG OF BORING B-13

LOCATION SEE LOCATION MAP

EQUIPMENT CME-55

ELEVATION _____ DATE 1/11/22

LABORATORY TESTS	FIELD BLOWS /6in	BLOWS/FT	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DEPTH (ft)	SAMPLE	
					0		**DARK BROWN SANDY FAT CLAY (CH)** organics up to 1 foot in depth, moist, stiff, highly plastic to medium plasticity clay, very fine sand, PP Su=1.5 ksf (7.5YR 3/4) (est.0% G/ 40% S/ 60% F)
	3 3 6	9			2		
					4		
	10 12 12	24			6		very stiff, PP Su=4.5 ksf
	3 7 8	15			8		**REDDISH BROWN SILTY SAND (SM)** dry medium density, medium plasticity silt, very fine sand (2.5YR 4/3) (est.0% G/ 60% S/ 40% F)
	7 7 10	17			10		**DARK BROWN LEAN CLAY (CL)** dry, very stiff, low to medium plasticity clay, PP Su=3.0 ksf (7.5YR 3/4) (est.0% G/ 60% S/ 40% F)
					12		TERMINATED @ 11.5'
					14		No Free Water Observed
					16		
					18		
					20		
					22		
					24		

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LOG OF BORING B-13

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PLATE 15

1 LOG LETTER SIZE GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 2/28/22

UNIFIED SOIL CLASSIFICATION CHART

MAJOR DIVISIONS				TYPICAL NAMES
COARSE GRAINED SOILS	GRAVELS More than half coarse fraction is larger than No.4 sieve size	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW	WELL GRADED GRAVELS, GRAVEL SAND MIXTURES
			GP	POORLY GRADED GRAVELS, GRAVEL SAND MIXTURES
		GRAVELS WITH OVER 12% FINES	GM	SILTY GRAVELS, POORLY GRADED GRAVEL–SAND–SILT MIXTURES
			GC	CLAYEY GRAVELS, POORLY GRADED GRAVEL–SAND–SILT MIXTURES
	SANDS More than half coarse fraction is smaller than No.4 sieve size	CLEAN SANDS WITH LITTLE OR NO FINES	SW	WELL GRADED SANDS, GRAVELLY SANDS
			SP	POORLY GRADED SANDS, GRAVELLY SANDS
		SANDS WITH OVER 12% FINES	SM	SILTY SANDS, POORLY GRADED SAND–SILT MIXTURES
			SC	CLAYEY SANDS, POORLY GRADED SAND–SILT MIXTURE
FINE GRAINED SOILS	SILTS AND CLAYS Liquid limit less than 50		ML	INORGANIC SILTS & VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL	ORGANIC CLAYS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS Liquid limit greater than 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			Pt	PEAT AND OTHER HIGHLY ORGANIC SOILS
ROCK				COBBLES/BOULDERS
				GRANITIC BEDROCK
				VOLCANIC BEDROCK

KEY TO TEST DATA

				Shear Strength, psf	Confining Pressure, psf	
LL	–	Liquid Limit (in %)	Tx	320	(2600)	Unconsolidated Undrained Triaxial
PL	–	Plastic Limit (in %)	TxCU	320	(2600)	Consolidated Undrained Triaxial
Gs	–	Specific Gravity	UC	2000		Unconfined Compression
SA	–	Sieve Analysis		Friction Angle; Cohesion, psf		
Consol	–	Consolidation	DS	36°	400	Consolidated Drained Direct Shear

SAMPLE DESIGNATION

- STANDARD PENETRATION TEST SAMPLE
- 2½" OD MODIFIED CALIFORNIA SAMPLE
- 3" OD MODIFIED CALIFORNIA SAMPLE
- SHELBY TUBE SAMPLE
- AUGER CUTTINGS SAMPLE
- LOCATION OF ROCK CORING
- OTHER "UNDISTURBED" SAMPLE
- OTHER BULK OR CLASSIFICATION SAMPLE

KEY TO SYMBOLS

- OBSERVED WATER LEVEL

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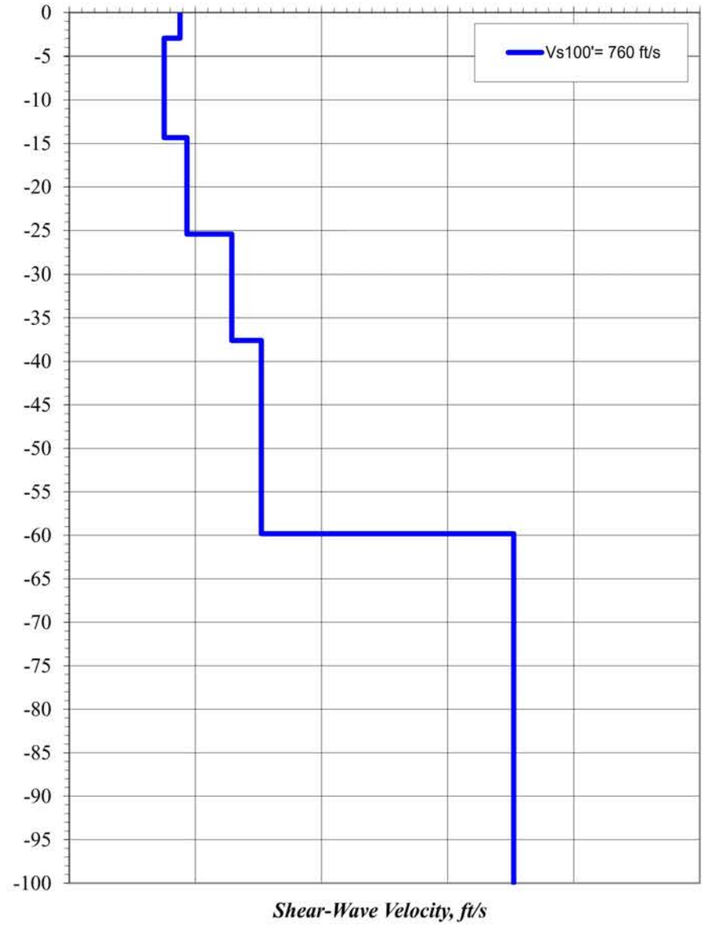
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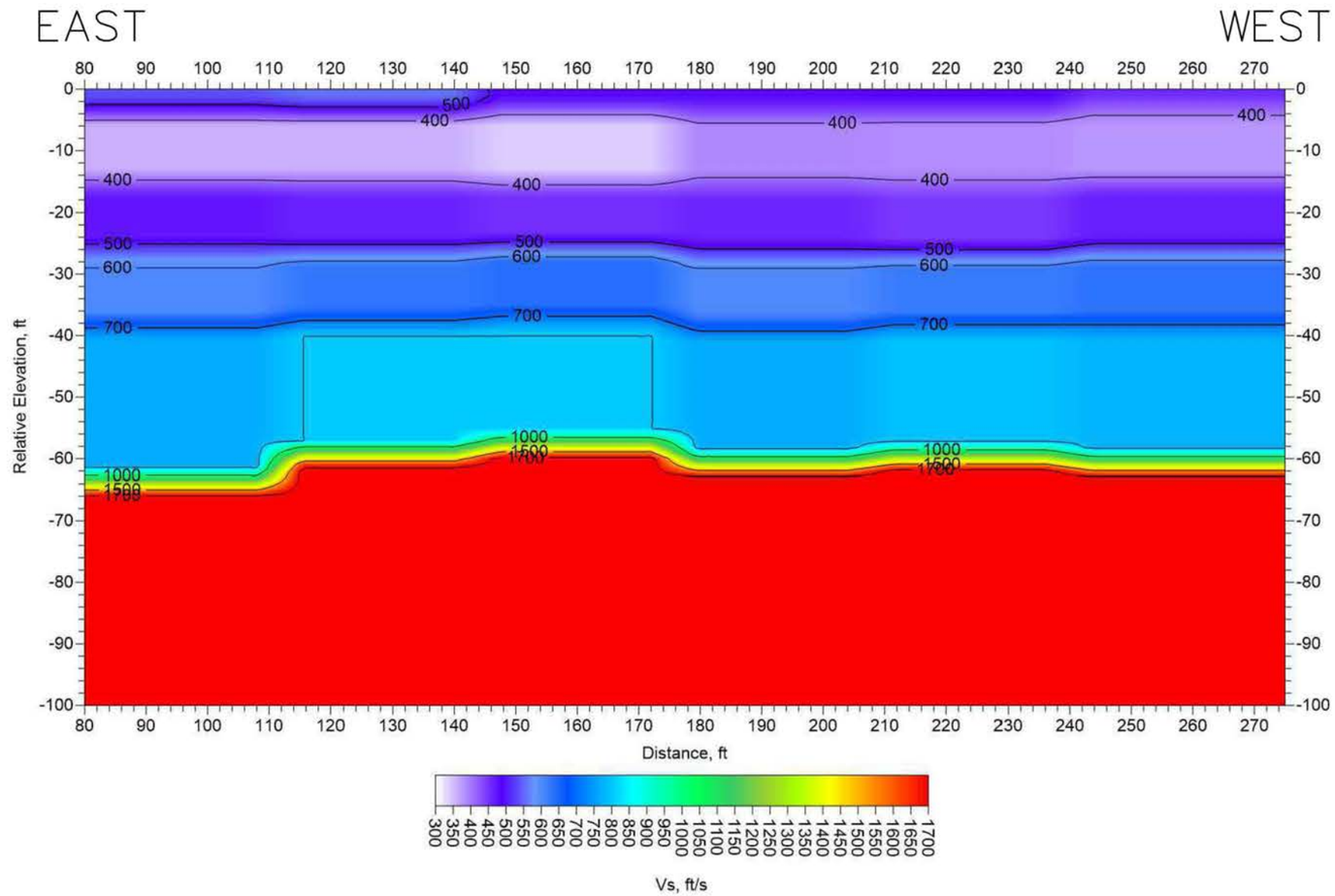
USCS CHART

GEOTECHNICAL INVESTIGATION REPORT
LOVES TRAVEL STOP
SUSANVILLE

LASSEN COUNTY **CALIFORNIA**

PLATE 16





J:\2021\21166.001 – Love's Truck Stop Susanville Geotech\Drawings and Plans\Susanville Geotechnical Report.dwg 2/28/22

Reno Tahoe Geo Associates, Inc.
P.O. Box 18449
Reno, Nevada 89511
CONSULTING CIVIL ENGINEERS
TEL (775)853-9100
FAX (775)853-9199

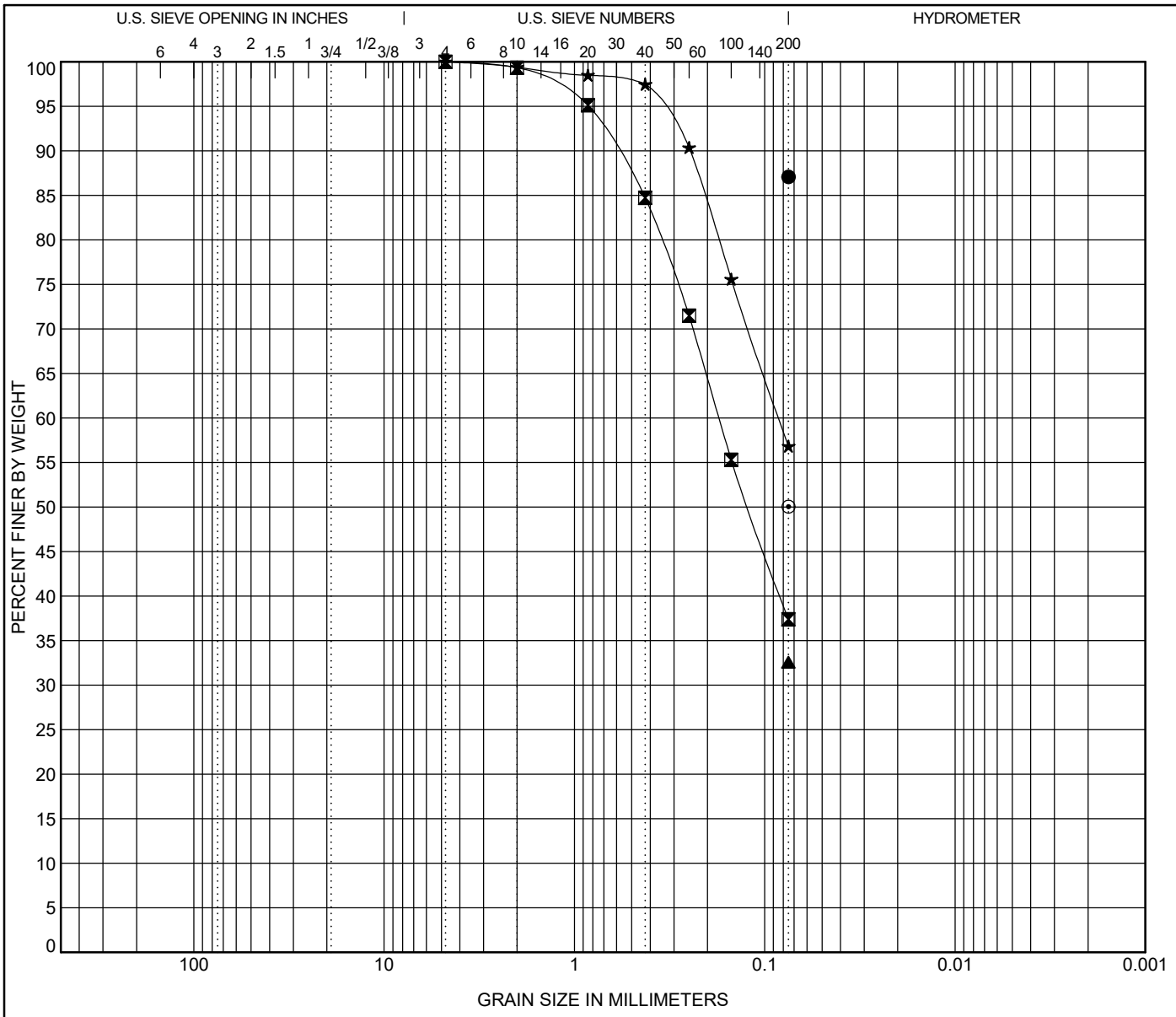
JOB # 21166.001 APPR: _____ DATE: 1/14/2022

REMI LINE RESULTS

GEOTECHNICAL INVESTIGATION REPORT
LOVES TRAVEL STOP
SUSANVILLE

LASSEN COUNTY CALIFORNIA

PLATE 17



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification		Classification	LL	PL	PI	Cc	Cu
●	B-01	2.5	FAT CLAY(CH)	56	21	35		
⊠	B-01	10.0	CLAYEY SAND(SC)	33	22	11		
▲	B-01	30.5	SILTY SAND(SM)	33	24	9		
★	B-02	11.0	SANDY SILT(ML)					
⊙	B-05	20.5	SANDY LEAN CLAY(CL)	36	20	16		

	Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	B-01	2.5	0.075						87.1	
⊠	B-01	10.0	4.75	0.174			0.0	62.6	37.4	
▲	B-01	30.5	0.075						32.6	
★	B-02	11.0	4.75	0.084			0.0	43.2	56.8	
⊙	B-05	20.5	0.075						50.0	

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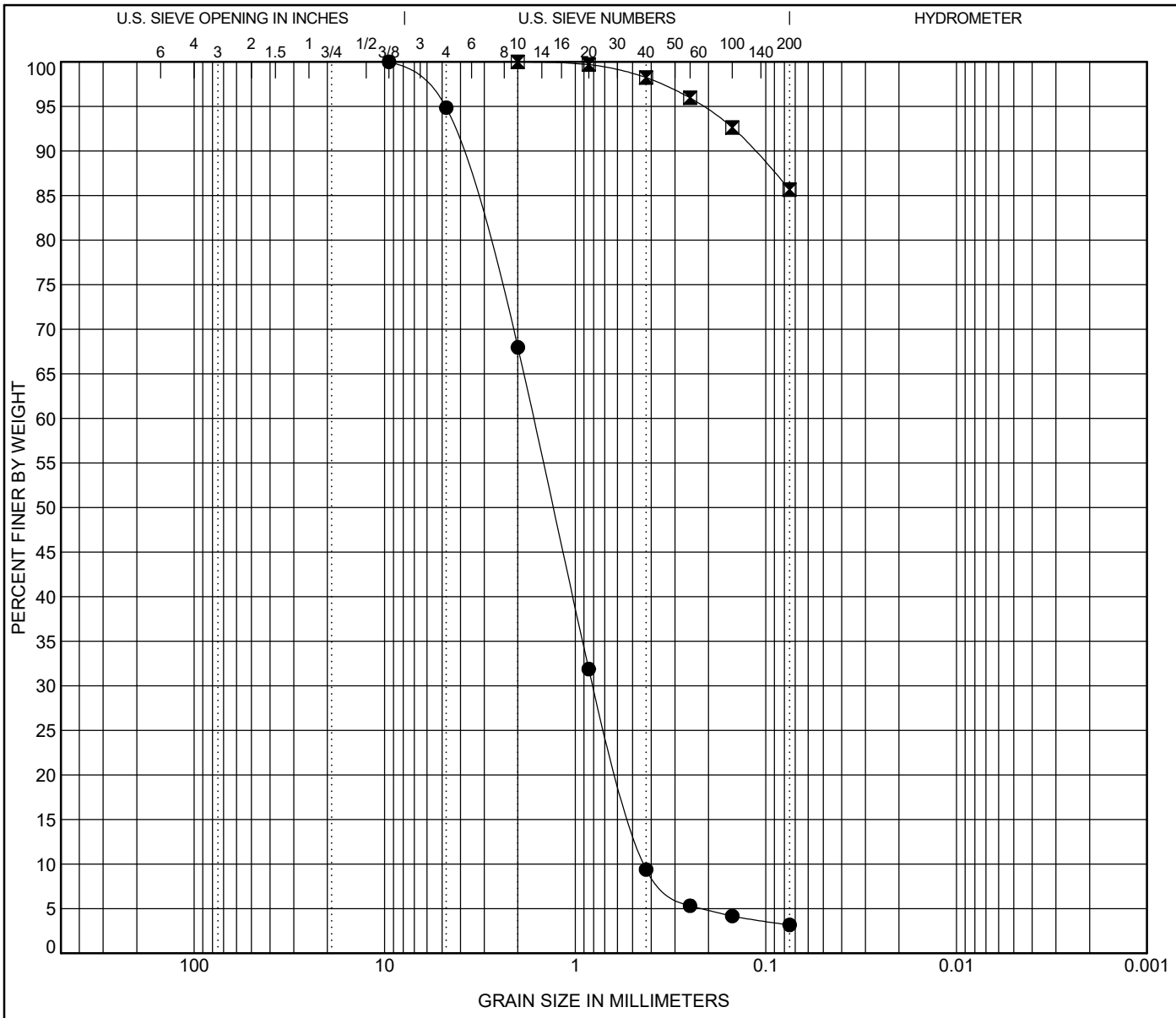
JOB # 21166.001 APPR: _____ DATE: 1/17/2022

GRAIN SIZE ANALYSIS

GEOTECHNICAL INVESTIGATION
LOVE'S TRAVEL STOP & COUNTRY STORES INC.
SUSANVILLE
LASSEN COUNTY CALIFORNIA

PLATE
18
1 of 2

GRAIN SIZE GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 2/28/22



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification		Classification	LL	PL	PI	Cc	Cu
●	B-06	6.0	POORLY GRADED SAND(SP)				0.90	3.82
⊠	B-07	15.0	FAT CLAY(CH)					

	Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	B-06	6.0	9.5	1.656	0.802	0.433	5.1	91.7	3.2	
⊠	B-07	15.0	2				0.0	14.3	85.7	

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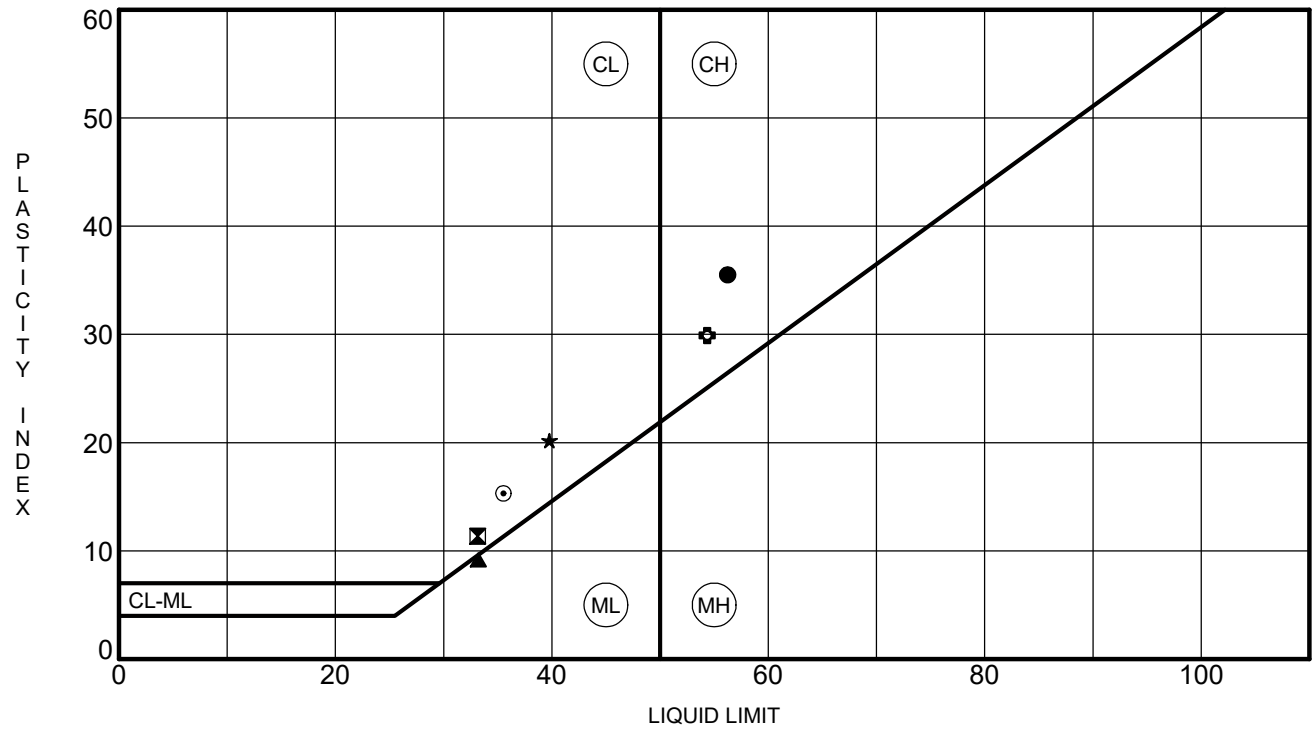
GRAIN SIZE ANALYSIS

GEOTECHNICAL INVESTIGATION
LOVE'S TRAVEL STOP & COUNTRY STORES INC.
SUSANVILLE

LASSEN COUNTY CALIFORNIA

PLATE 18 2 of 2

GRAIN SIZE GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 2/28/22



	Specimen Identification		LL	PL	PI	Fines	Classification
●	**B-01**	**2.5**	**56**	**21**	**35**	**87**	**FAT CLAY(CH)**
⊠	**B-01**	**10.0**	**33**	**22**	**11**	**37**	**CLAYEY SAND(SC)**
▲	**B-01**	**30.5**	**33**	**24**	**9**	**33**	**SILTY SAND(SM)**
★	**B-04**	**5.5**	**40**	**20**	**20**		**SANDY LEAN CLAY(CL)**
⊙	**B-05**	**20.5**	**36**	**20**	**16**	**50**	**SANDY LEAN CLAY(CL)**
✿	**B-07**	**20.5**	**54**	**24**	**30**		**FAT CLAY WITH SAND(CH)**

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ATTERBERG LIMITS

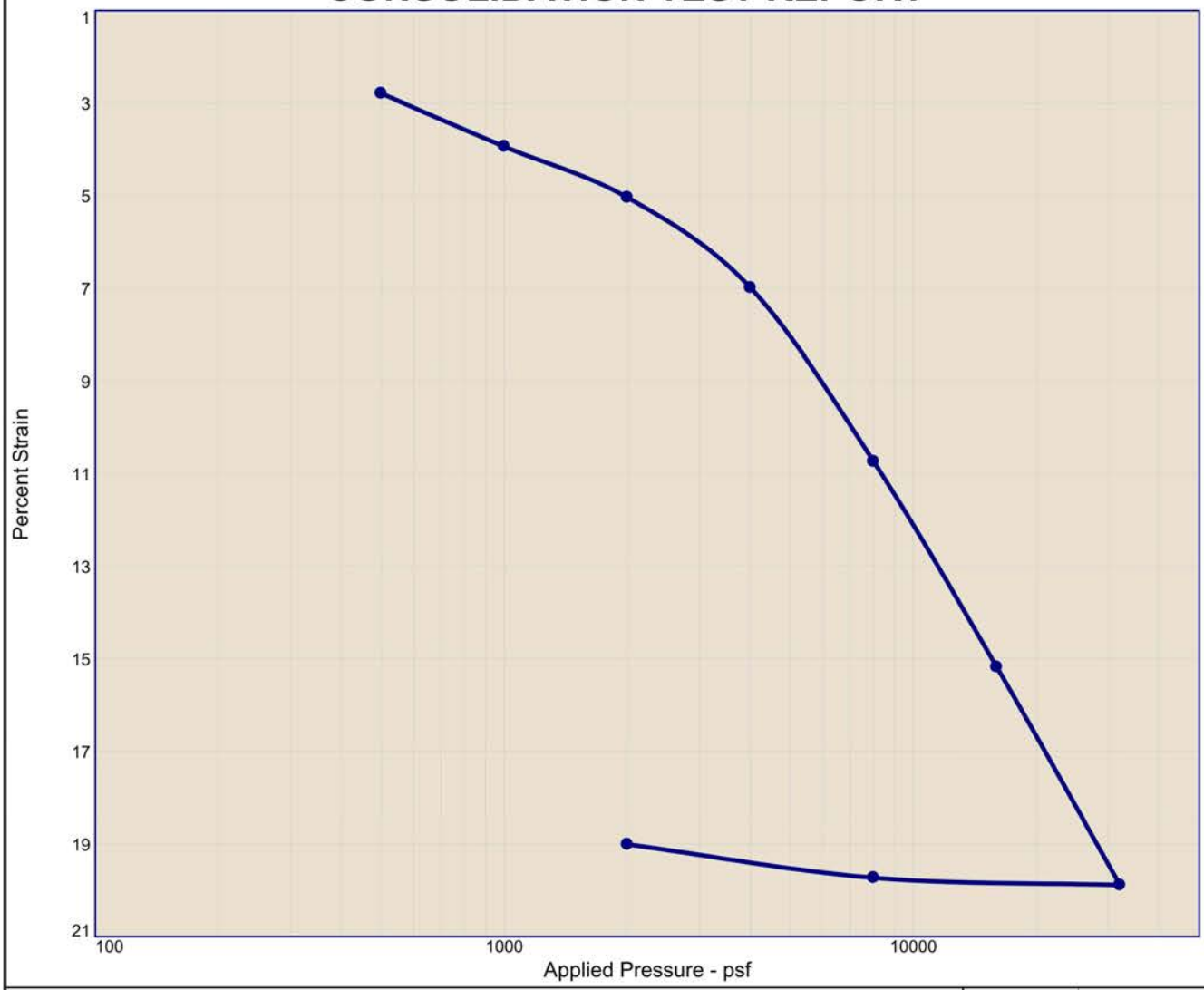
GEOTECHNICAL INVESTIGATION
LOVE'S TRAVEL STOP & COUNTRY STORES INC.
SUSANVILLE

LASSEN COUNTY CALIFORNIA

PLATE
19

ATTERBERG LIMITS GEOTECH.GPJ MED DATA TEMPLATE 2015A.GDT 2/28/22

CONSOLIDATION TEST REPORT



MATERIAL DESCRIPTION	USCS	AASHTO

LL	PI	Sp. Gr.	Overburden (psf)	Dry Dens. (pcf)		Moisture		Saturation		Void Ratio		P_c (psf)	CR
				Init.	Final	Init.	Final	Init.	Final	Init.	Final		
54	30	2.76	2500	71.4		52.0 %	36.8 %	101.6 %	100.0 %	1.414	0.955	3600	0.15

Preparation Process: IN SITU

Condition of Test: INUDATED

D2435 Method	RR	Swell Press. (psf)	Swell %
ASTM	0.02	NA	NA

Project No. 2428 **Client:** RENO TAHOE GEO ASSOCIATES

Project: RTGEO - TESTING AS ORDERED

Loc.: LOVE'S TRUCK STOP #21166.001, B-7 **Sample No.:** 36134

CME CONSTRUCTION MATERIALS ENGINEERS, INC.

Remarks:

Checked By: N. ANDERSON

Title:

PLATE

Tested By: M. PONTONI

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JOB # 21166.001 APPR: JWP DATE: 2/18/2022

CONSOLIDATION TEST REPORT

GEOTECHNICAL INVESTIGATION REPORT
LOVES TRAVEL STOP
SUSANVILLE

LASSEN COUNTY CALIFORNIA

PLATE 20

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Western Environmental Testing Laboratory
Analytical Report

Reno Tahoe Geo Associates, Inc.
P.O. Box 18449
Reno, NV 89511
Attn: Elaine Pinnow
Phone: (775) 853-9100 Fax: NoFax
PO\Project: *Loves Truck Stop- Susanville / 211166.001*

Date Printed: 2/8/2022
OrderID: *22010654*

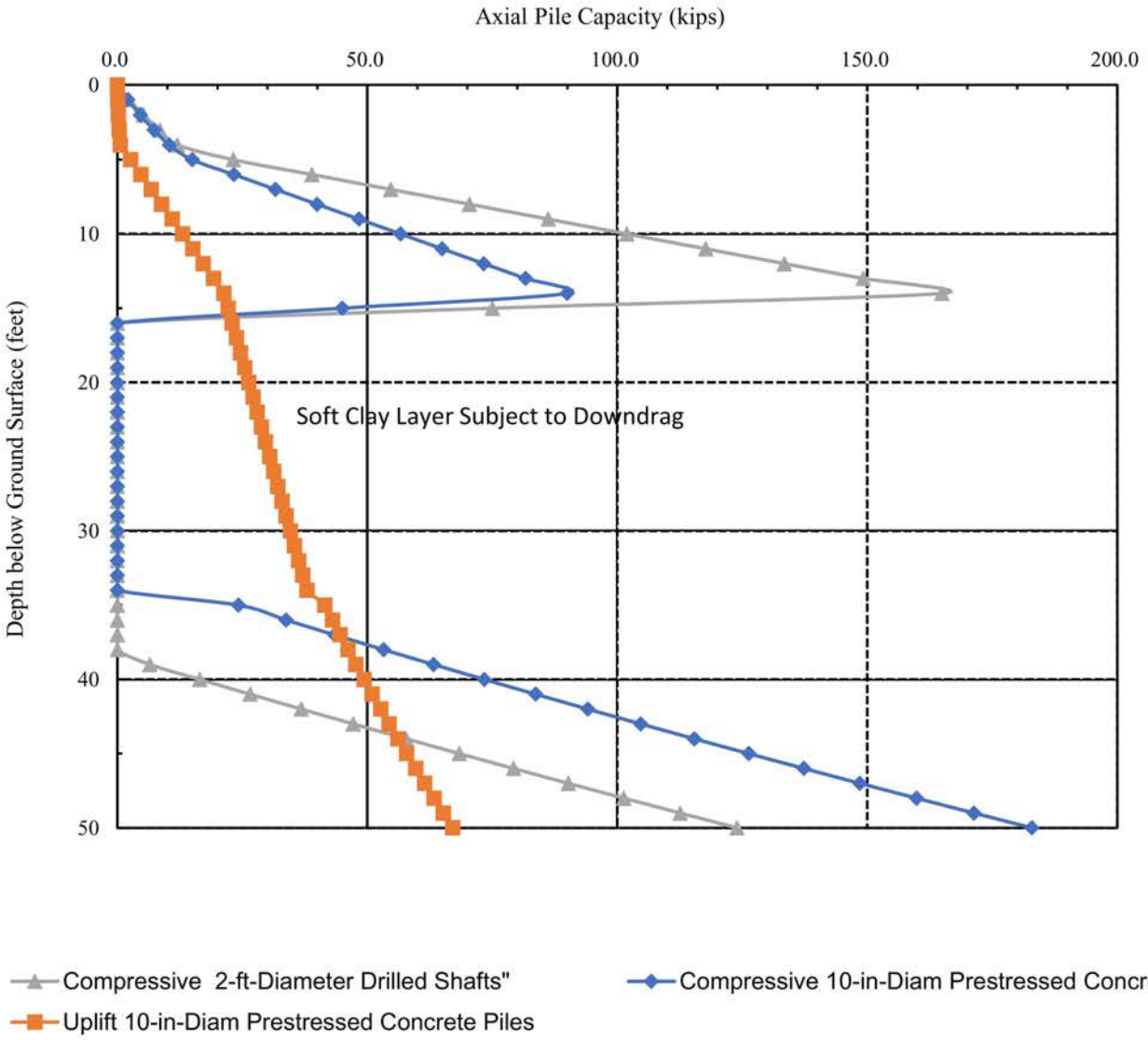
Customer Sample ID: B-4 at 2.5-4.0 feet
WETLAB Sample ID: 22010654-001

Collect Date/Time: 1/12/2022 12:00
Receive Date: 1/25/2022 12:33

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
General Chemistry							
Paste pH	SW846 9045D	8.32	pH Units	1		1/26/2022	NV00925
Resistivity	SM 2510B	12000	ohms.cm	1	1.0	1/26/2022	NV00925
Anions by Ion Chromatography							
Chloride	EPA 300.0	ND	mg/kg	10	10	1/26/2022	NV00925
Sulfate	EPA 300.0	ND	mg/kg	10	15	1/26/2022	NV00925
Sample Preparation							
10:1 DI Water Extraction	WL 10.0	Complete		1		1/25/2022	NV00925
Saturated Paste Preparation	CSTPM S:1.0	Complete		1		1/26/2022	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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JOB # 21166.001 APPR: JWP DATE: 2/18/2022

FOUNDATION CAPACITY vs. DEPTH

GEOTECHNICAL INVESTIGATION REPORT
LOVES TRAVEL STOP
SUSANVILLE

LASSEN COUNTY CALIFORNIA

PLATE 22

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR SUSANVILLE TRAVEL STOP

GENERAL INFORMATION

To: Interested Agencies, Organizations, and Parties

Project Title: Susanville Travel Stop

Review Period: February 3, 2025 to March 5, 2025

Lead Agency: City of Susanville
66 N Lassen Street
Susanville, CA 96130
Contact: Dan Newton, City Manager (530) 252-5106 (phone) / 530-252-1020 (fax)
E-mail: dnewton@cityofsusanville.org

Purpose of Notice: In accordance with provisions of the California Environmental Quality Act (CEQA) (Public Resources Code, Division 13, Sections 21000–21177) and the CEQA Guidelines (California Code of Regulations, Title 14, Sections 15000–15387), the City of Susanville is distributing a Notice of Preparation (NOP) to solicit comments on the scope of the Environmental Impact Report (EIR) to address the environmental impacts of development of the proposed Susanville Travel Stop (project). This NOP provides a summary of the proposed project, general background information on the scoping process, the environmental issues to be addressed in the EIR, and the anticipated uses of the EIR. This NOP is intended to satisfy the requirements of Public Resources Code section 21080.4, subdivision (a), and CEQA Guidelines Section 15082, subdivisions (a) and (b).

Project Location: The project site is located on an approximate 14.15-acre vacant parcel situated to the southeast of the City of Susanville (Figure 1). The project site is located in an area within the unincorporated territory of Lassen County that is proposed for annexation into the City of Susanville in the City of Susanville General Plan. The project site is part of a larger 79.6-acre parcel (Assessor's Parcel Number [APN] 107-280-017), located immediately south of Susanville city limits and west of State Route (SR) 36 (Figure 2), although the remainder of the parcel would remain undeveloped.

Project Description

Lane Engineers, Inc. (applicant) is proposing to construct for operation a full-service travel stop (project) on approximately 14.15 acres of vacant land to the southeast of the City of Susanville (project site). The proposed project includes a travel stop, which would provide professional truck drivers and motorists with 24-hour access to purchase gasoline, diesel, propane, electronic items, snacks, travel items, and food from two fast-food restaurants, one with drive-thru. A dog park, Recreational Vehicle (RV) dump station, bioretention basins, truck, RV and automobile parking areas and landscaping/lighting are also proposed, along with a 10-space overnight RV park. Project visitors/customers would include "over-the-road" trucks (i.e., professional long-haul drivers who are on the road for consecutive days or weeks at a time), traveling motorists, and local residents. Primary access to the project site would be provided from State Route (SR) 36 via an existing signalized intersection at SR 36 and Skyline Road but with a new dedicated exit lane southbound and a new northbound dedicated turn lane onto Skyline Road. Ingress/egress would be provided via two entry/exit points off Skyline Road, the first for RVs and automobiles and the second for trucks.

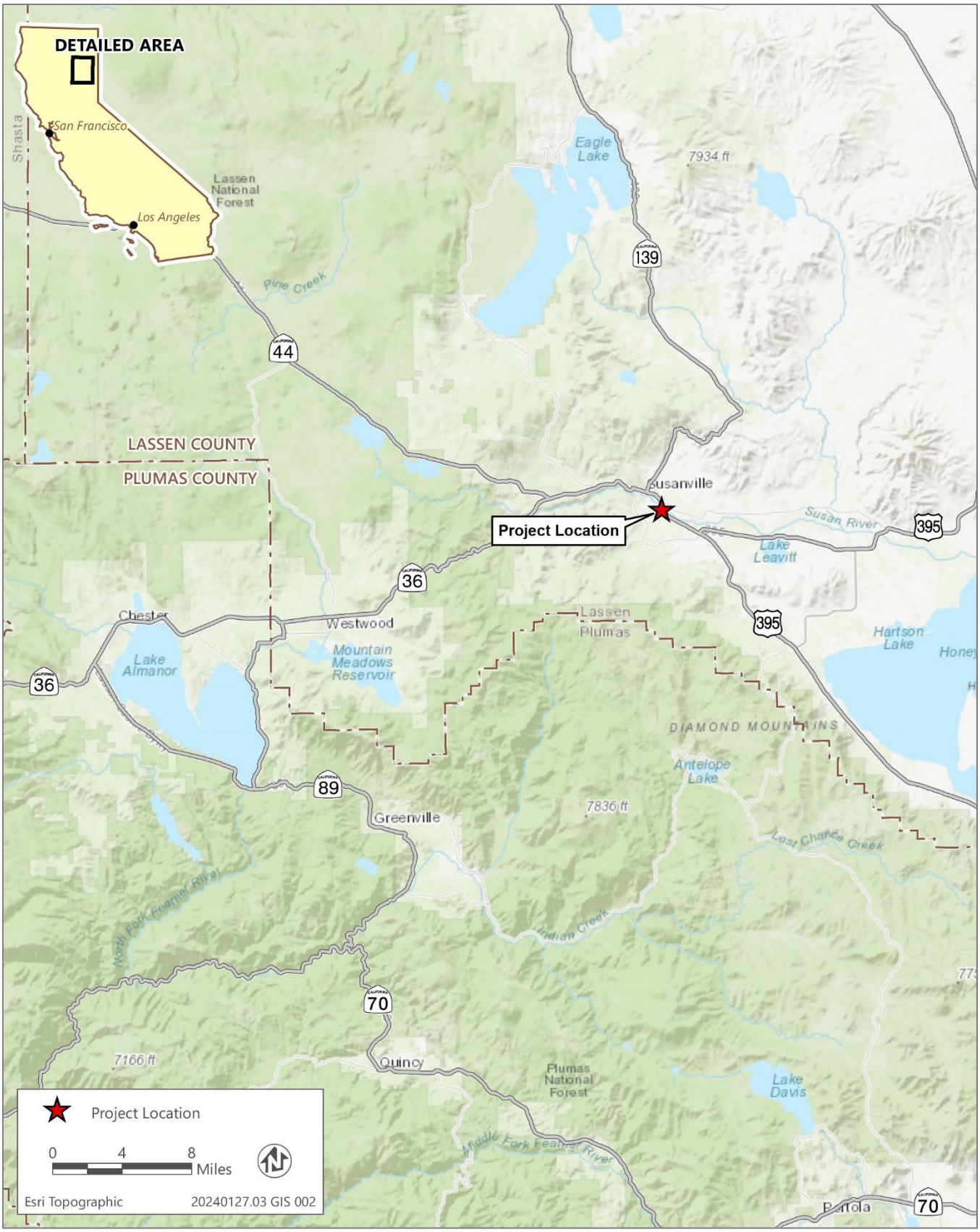


Figure 1 Regional Vicinity

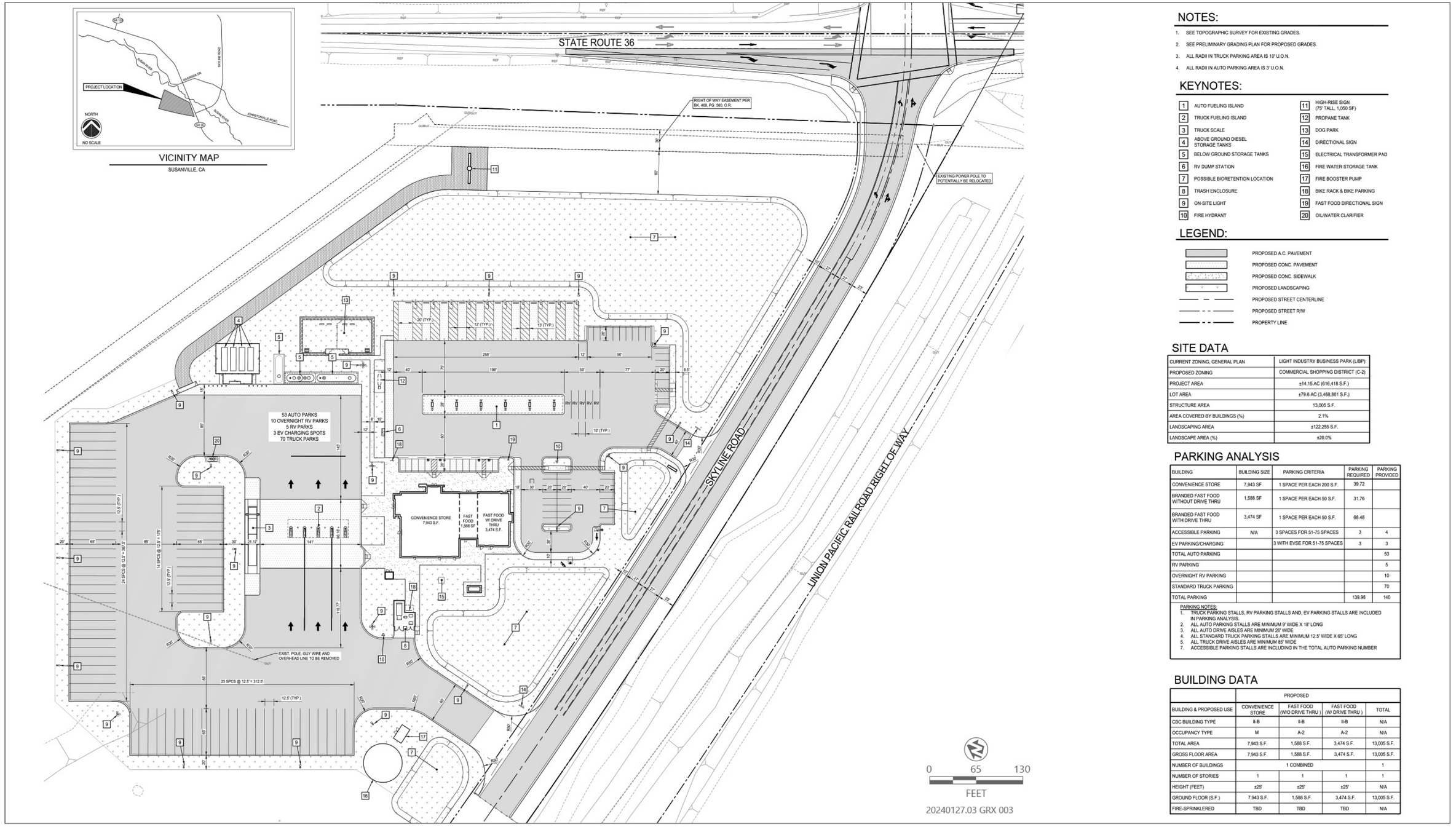


Figure 2 Local Vicinity

The proposed project includes a travel stop, which would provide professional truck drivers and motorists with 24-hour access to purchase gasoline, diesel, propane, electronics, snacks, travel items, and food from two fast-food restaurants, one with drive-thru. A dog park, recreational vehicle (RV) dump station, bioretention basins, truck, RV and automobile parking areas and landscaping/lighting are also proposed, along with a 10-space overnight RV park. Finish grading for the entire project site would be balanced onsite. The complete project site is shown in Figure 2. The site plan is shown on Figure 3 and project elevations and floor plans are shown on Figure 4 and Figure 5 respectively.

Project characteristics and design features are listed below and summarized in the following sections:

- a 12-position passenger vehicle fueling station;
- a 4-position truck fueling station;
- a combined 13,005-square foot (SF) convenience store and two fast-food options, approximately 25 ft in height. 7,943 SF would be convenience store; the smaller of the two fast food options would be 1,588 SF with 3,474 SF for the fast-food restaurant with drive-thru;
- a 5,000 SF dog park;
- a truck scale;
- an RV dump station;
- a 1,000-gallon propane tank;
- a 30,000-gallon below ground gasoline storage tank, including fuel delivery parking;
- four 12,000-gallon above-ground diesel storage tanks for truck fueling, including fuel delivery parking;
- a 20,000 two-compartment split tank with 12,000 gallons of diesel for automobiles and 8,000 of premium unleaded for automobiles;
- a 20,000-gallon diesel exhaust fluid storage tank
- 70 standard truck parking spaces, 53 automobile parking spaces, five RV parking spaces, three electric vehicle (EV) charging station spaces, three accessible parking spaces and 10 overnight RV parking spaces with full hookups (power, water, and sewer);
- on site lighting, consisting of high-mast LED fixtures and LED canopy lighting - 43' in truck areas and 33' in auto areas;
- high-rise sign (75 ft in height), and other directional signage;
- bicycle rack and bicycle parking (8 short term spaces and 2 long term spaces);
- trash compactor, recycling and grease collection bins;
- landscaping, hardscaping, pavement, and fencing;
- one 200,000-gallon fire water supply storage tank and associated booster pump;
- four stormwater bioretention basins between - 6,272 SF and 86,247 SF; and
- rooftop solar panels



NOTES:

1. SEE TOPOGRAPHIC SURVEY FOR EXISTING GRADES.
2. SEE PRELIMINARY GRADING PLAN FOR PROPOSED GRADES.
3. ALL RADII IN TRUCK PARKING AREA IS 10' U.O.N.
4. ALL RADII IN AUTO PARKING AREA IS 3' U.O.N.

KEYNOTES:

1	AUTO FUELING ISLAND	11	HIGH-RISE SIGN (75' TALL, 1,050 SF)
2	TRUCK FUELING ISLAND	12	PROPANE TANK
3	TRUCK SCALE	13	DOG PARK
4	ABOVE GROUND DIESEL STORAGE TANKS	14	DIRECTIONAL SIGN
5	BELOW GROUND STORAGE TANKS	15	ELECTRICAL TRANSFORMER PAD
6	RV DUMP STATION	16	FIRE WATER STORAGE TANK
7	POSSIBLE BIORETENTION LOCATION	17	FIRE BOOSTER PUMP
8	TRASH ENCLOSURE	18	BIKE RACK & BIKE PARKING
9	ON-SITE LIGHT	19	FAST FOOD DIRECTIONAL SIGN
10	FIRE HYDRANT	20	OIL/WATER CLARIFIER

LEGEND:

- PROPOSED A.C. PAVEMENT
- PROPOSED CONC. PAVEMENT
- PROPOSED CONC. SIDEWALK
- PROPOSED LANDSCAPING
- PROPOSED STREET CENTERLINE
- PROPOSED STREET R/W
- PROPERTY LINE

SITE DATA

CURRENT ZONING, GENERAL PLAN	LIGHT INDUSTRY BUSINESS PARK (LIBP)
PROPOSED ZONING	COMMERCIAL SHOPPING DISTRICT (C-2)
PROJECT AREA	±14.15 AC (616,418 S.F.)
LOT AREA	±79.6 AC (3,468,861 S.F.)
STRUCTURE AREA	13,005 S.F.
AREA COVERED BY BUILDINGS (%)	2.1%
LANDSCAPING AREA	±122,255 S.F.
LANDSCAPE AREA (%)	±20.0%

PARKING ANALYSIS

BUILDING	BUILDING SIZE	PARKING CRITERIA	PARKING REQUIRED	PARKING PROVIDED
CONVENIENCE STORE	7,943 SF	1 SPACE PER EACH 200 S.F.	39.72	
BRANDED FAST FOOD WITHOUT DRIVE THRU	1,588 SF	1 SPACE PER EACH 50 S.F.	31.76	
BRANDED FAST FOOD WITH DRIVE THRU	3,474 SF	1 SPACE PER EACH 50 S.F.	68.48	
ACCESSIBLE PARKING	N/A	3 SPACES FOR 51-75 SPACES	3	4
EV PARKING/CHARGING		3 WITH EVSE FOR 51-75 SPACES	3	3
TOTAL AUTO PARKING				53
RV PARKING				5
OVERNIGHT RV PARKING				10
STANDARD TRUCK PARKING				70
TOTAL PARKING			139.96	140

PARKING NOTES:
1. TRUCK PARKING STALLS, RV PARKING STALLS AND, EV PARKING STALLS ARE INCLUDED IN PARKING ANALYSIS.
2. ALL AUTO PARKING STALLS ARE MINIMUM 9' WIDE X 18' LONG
3. ALL AUTO DRIVE AISLES ARE MINIMUM 26' WIDE
4. ALL STANDARD TRUCK PARKING STALLS ARE MINIMUM 12.5' WIDE X 65' LONG
5. ALL TRUCK DRIVE AISLES ARE MINIMUM 85' WIDE
7. ACCESSIBLE PARKING STALLS ARE INCLUDING IN THE TOTAL AUTO PARKING NUMBER

BUILDING DATA

	PROPOSED			
BUILDING & PROPOSED USE	CONVENIENCE STORE	FAST FOOD (W/O DRIVE THRU)	FAST FOOD (W/ DRIVE THRU)	TOTAL
CBC BUILDING TYPE	II-B	II-B	II-B	N/A
OCCUPANCY TYPE	M	A-2	A-2	N/A
TOTAL AREA	7,943 S.F.	1,588 S.F.	3,474 S.F.	13,005 S.F.
GROSS FLOOR AREA	7,943 S.F.	1,588 S.F.	3,474 S.F.	13,005 S.F.
NUMBER OF BUILDINGS	1 COMBINED			1
NUMBER OF STORIES	1	1	1	1
HEIGHT (FEET)	±25'	±25'	±25'	N/A
GROUND FLOOR (S.F.)	7,943 S.F.	1,588 S.F.	3,474 S.F.	13,005 S.F.
FIRE-SPRINKLERED	TBD	TBD	TBD	N/A

Figure 3 **Site Plan**



Figure 4 Building Elevation

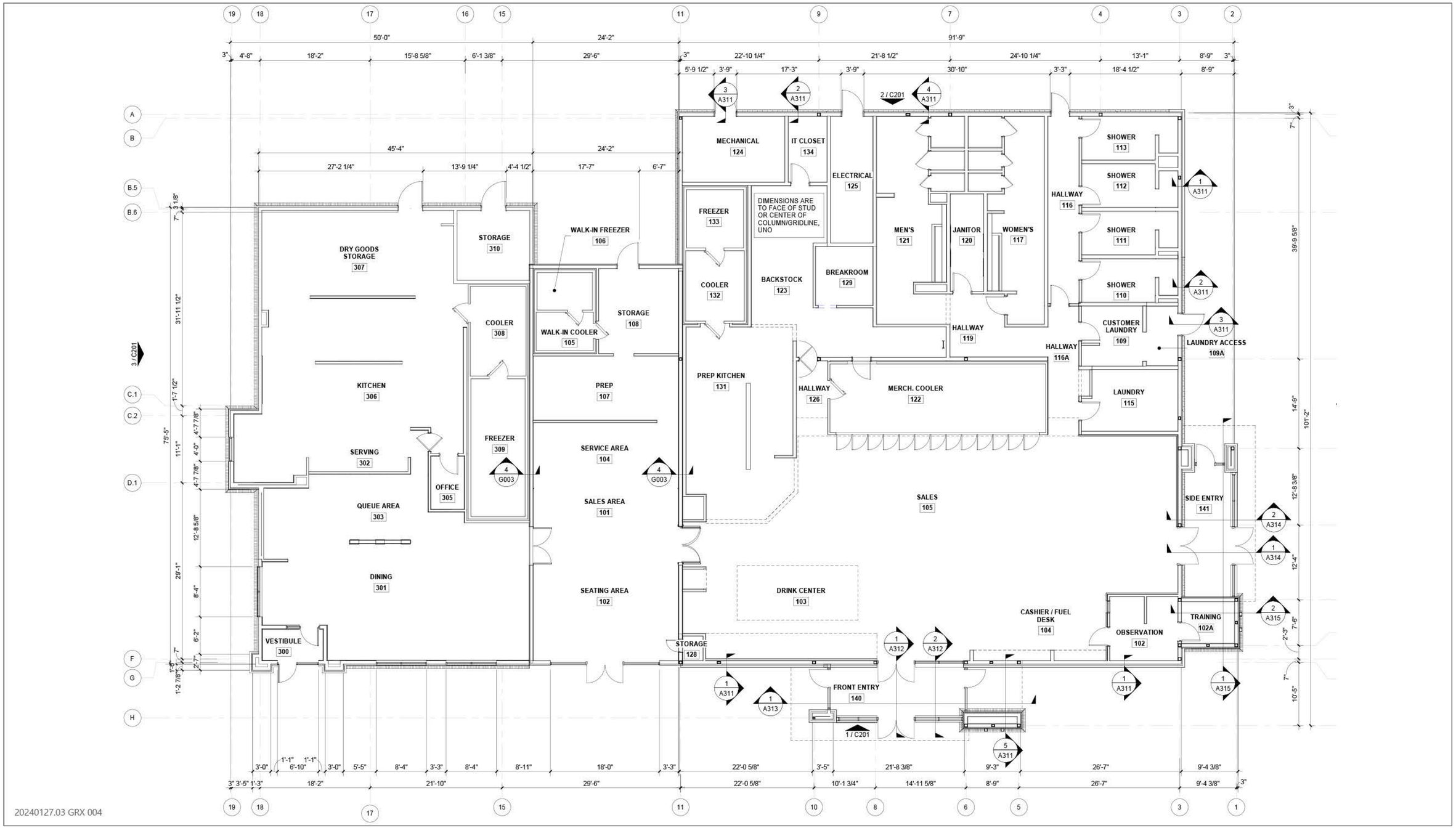


Figure 5 Floor Plan

Table 1 provides a summary of the proposed land uses.

Table 1 Summary of Proposed Land Uses

Building/Use	Square Feet
Convenience Store	7,943
Fast-Food Counter	1,588
Fast-Food Restaurant (w/drive-through)	3,474
Dog Park	5,000
Landscaping	122,255
Parking	**Number of Spaces**
EV Parking/Charging	3
Total Auto Parking (including 4 Accessible spaces)	53
RV Parking	5
Overnight RV Parking	10
Standard Truck Parking	70
Total	**141**

Source: Information provided by project applicant and compiled by Ascent Environmental in 2024.

The project would include a 7,943-SF convenience store, one 1,588-SF fast-food option and another 3,474-SF fast-food restaurant with an external drive-through window. The convenience store and fast-food restaurants would occupy the same building, which would be located between the automobile and truck fueling stations and would be in the central portion of the project site. The area north and east of the building would include automobile parking, with overnight RV parking to the very north; and the western and southwestern portions of the project site would consist of parking spaces for trucks. The auto fueling bays and diesel fueling bays would be accessible by separate entry points and be physically separated by the building housing the fast-food restaurant and convenience store. Underground gasoline storage tanks would be in the northwest corner of the project site and would consist of a 30,000-gallon tank for unleaded fuel, a 20,000-gallon split tank with 12,000 gallons of diesel for automobiles and 8,000 of premium unleaded for automobiles, and a 20,000-gallon diesel exhaust fluid tank for diesel exhaust fluid. Above-ground diesel storage tanks would be located in the same portion of the site and consist of four 12,000-gallon tanks to hold diesel.

Truck and automobile fueling bays would be covered by a canopy and would have a hydrologically isolated drainage system that discharges to an oil/water separator. The four above-ground storage tanks would include a concrete containment curb that would catch and retain fuel in the event of a fuel spill.

The proposed four stormwater bioretention basins would collect surface runoff from the project site (see Figure 3). Bioretention systems are designed to function in a manner similar to the physical, chemical, and biological processes in the natural environment. These systems capture runoff, promote infiltration and evapotranspiration, recharge groundwater, and remove nutrients, sediment, and heavy metals carried in stormwater.

Landscaping would cover approximately 122,255 SF (20 percent) of the 14.15-acre project site. Landscaping would include native plants, xeriscaping, or other drought resistant plants, consistent with the Landscaping Regulations included in Chapter 17.96.040 of the City of Susanville Code of Ordinances. The landscape plan is shown in Figure 5.

The project would provide a total of 141 parking spaces, split into 70 standard truck parking spaces, 53 automobile parking spaces, five RV parking spaces, three electric vehicle (EV) charging station spaces, and 10 overnight RV parking spaces; four of the automobile spaces would be accessible per the requirements of the Americans with Disabilities Act (ADA). Overnight truck parking would be available; however, idling of trucks would be limited to no more than five minutes, consistent with California Air Resources Board (CARB) requirements.

PROJECT OBJECTIVES

Consistent with CEQA Guidelines Section 15124(b), a clear statement of the objectives and underlying purpose of the project shall be disclosed in the Draft EIR. The underlying purpose of the project is to develop a regional travel stop and related commercial land uses on Regional Commercial (C-R)-designated land within unincorporated Lassen County on land that will be annexed into the City of Susanville via processing of an annexation application by the Lassen County Local Agency Formation Commission (LAFCO). This underlying purpose, in turn, gives rise to the following project objectives:

- Create a high-quality travel stop commercial development along SR 36, a designated Surface Transportation Assistance Act (STAA) route.[1]
- Develop a property of sufficient size to create a regional travel stop that would accommodate a truck and auto fuel dispensing area, convenience store, fast-food restaurant, dog park, truck parking and overnight RV parking.
- Construct a travel stop facility near a major highway to minimize truck and automobile movements, Vehicle Miles Traveled (VMT), and associated air pollutant and greenhouse gas emissions and traffic noise on local streets.
- Assist the City of Susanville with meeting its economic development goals, as set forth in its General Plan.
- Maximize tax revenue to the City of Susanville.
- Provide employment opportunities for residents of the City of Susanville and surrounding areas.
- Construct a facility with proximal access to adequate existing or anticipated utility infrastructure to support planned operations.
- Provide a travel stop facility of sufficient size to capture overflow overnight truck parking.

PROBABLE ENVIRONMENTAL IMPACTS

Pursuant to Public Resources Code section 21003(e) and CEQA Guidelines Section 15064, the discussion of effects on the environment in the EIR shall be focused on those impacts that the City has determined may be potentially significant. The EIR also will evaluate the cumulative impacts of the project when considered in conjunction with other related past, present, and reasonably foreseeable future projects. Although, at this very early stage of the environmental review process, it is impossible to know with certainty the precise nature and extent of the environmental effects that will be identified as preparation of the Draft EIR gets underway in earnest, it is possible to identify key categories of environmental effects that the proposed project will implicate. The City has determined that the EIR will evaluate the following environmental impacts in the main body of the Draft EIR, with other categories of impacts being addressed in less detail in the Initial Study Checklist attached as an appendix to the Draft EIR (and also included as an attachment to this NOP):

- **Air Quality/Greenhouse Gas Emissions:** This project is located within Lassen County Air Pollution Control District (APCD jurisdiction. During construction and operation, the project would emit criteria air pollutants, primarily through vehicular operation. The Draft EIR will quantify the project's construction- and operation-related emissions of criteria air pollutants and precursors (e.g., reactive organic gases [ROG], nitrogen oxides [NO_X], sulfur dioxide [SO_2], carbon monoxide [CO], respirable particulate matter [PM_{10}], and fine particulate matter [$PM_{2.5}$]). The Draft EIR will also evaluate the potential for substantial concentrations of toxic air contaminants perceived by nearby land uses as a result of project implementation. Greenhouse gas (GHG) emissions, particularly from any additional truck and automobile trips, will be assessed in the EIR. The Draft EIR will recommend mitigation measures, if necessary.

[1] STAA routes are those that trucks that are longer than 'CA legal' are allowed to travel on.

- **Biological Resources:** The Draft EIR will include a description of the special-status plant and wildlife species known to occur within the project site, and a determination of whether suitable habitat exists on-site to support any special-status species. The chapter will also assess impacts to riparian habitat or other sensitive natural community and effects on state or federally protected wetlands. The chapter will be based a survey of the project site and any off-site infrastructure alignments. Mitigation measures to reduce impacts to sensitive resources will be developed and recommended as necessary.
- **Cultural Resources and Tribal Cultural Resources:** The Draft EIR will evaluate potential effects to archaeological resources from implementation of the proposed project, focusing on any unique archaeological resources, historical resources, or tribal cultural resources. These chapters will be based on a site-specific technical report. A records search will be conducted to identify any documented historical or archaeological resources on or immediately adjacent to the project site. In accordance with Assembly Bill 52, Native American tribes that have traditional lands or cultural places located within the project site and vicinity will be consulted. The Draft EIR will provide mitigation measures as needed.
- **Energy:** The Draft EIR will discuss the potential impacts of the project's energy usage, emphasizing any inefficient, wasteful, or unnecessary energy consumption, including an analysis of any change in vehicle miles traveled. The analysis will be informed by reference to Appendix F of the CEQA Guidelines. The Draft EIR will provide mitigation measures as needed.
- **Geology and Soils:** The Draft EIR will summarize the setting and identify any unique geological features within the project site. The chapter will also include an assessment of potential impacts to paleontological resources from project implementation. The Draft EIR will provide mitigation measures as needed.
- **Noise and Vibration:** The Draft EIR will evaluate noise increases because of traffic and construction, and ground vibration due to construction and truck movements. The significance of transportation noise impacts will be determined in relation to the City's General Plan. The Draft EIR will provide mitigation measures as needed.
- **Transportation/Traffic:** The Draft EIR will include a project-specific technical traffic study that evaluates potential project impacts on traffic and Vehicle Miles Travelled, and suggests mitigation measures as needed.
- **Utilities and Service Systems:** The Draft EIR will evaluate and discuss potential impacts related to construction of new water, wastewater, natural gas, and electricity utilities associated with the project, and provide mitigation measures as needed. The Draft EIR will evaluate the impacts associated with construction of the proposed utilities installation.

The following topics will not be discussed in the main body of the Draft EIR but rather will be discussed solely in the Initial Study attached to the Draft EIR as an appendix (and also included as an attachment to this NOP):

- **Aesthetics.** The Susanville Vicinity Area Plan does not identify any scenic vistas in the vicinity of the city and there are no eligible or officially designated scenic highways or trees, rock outcroppings, and historic buildings within a state scenic highway in the project's vicinity. Adherence to City of Susanville Code of Ordinances regarding lighting and glare would ensure no significant impacts, and this topic will not be discussed in the main body of the Draft EIR.
- **Agriculture and Forestry Resources:** The project site is zoned Industrial Park and is currently vacant. There are no agricultural lands (including lands classified by the California Resources Agency as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) or forest lands within or in proximity the project site. Therefore, no impacts on agriculture and forestry resources are anticipated, and this topic will not be discussed in the main body of the Draft EIR.
- **Hazards and Hazardous Materials**. Compliance with all applicable federal, state, and local requirements concerning the use, storage, and management of hazardous materials, including, but not limited to the Resource Conservation and Recovery Act (RCRA), Hazardous Materials Transportation Act (HMTA), California Hazardous Waste Control Law, federal and state Occupational Safety and Health Acts, Lassen County APCD rules, and permits and associated conditions issued by the City of Susanville would ensure less than significant impacts, and this topic will not be discussed in the main body of the Draft EIR.

- Hydrology and Water Quality. The City of Susanville is within the jurisdiction of the Lahontan Regional Water Quality Control Board (LRWQCB), which is responsible for the preparation and implementation of the water quality control plan for the Region 6 area. For all construction activities disturbing one acre of land or more, California also mandates the development and implementation of Stormwater Pollution Prevention Plans (SWPPP). During construction, per the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, the project would be required to implement a Stormwater Pollution Prevention Plan (SWPPP) that includes Best Management Practices (BMPs) to reduce pollutants in stormwater runoff from the project site. The BMPs would adhere to the California Stormwater Quality Association BMP Handbook and would include, but not be limited to, use of sandbags, storm drain inlets protection, stabilized construction entrance, wind erosion control, and stockpile management to minimize the discharge of pollutants in stormwater during construction. Additionally, the project would incorporate water quality BMPs as part of the LRWQCB mandated SWPPP to reduce the potential for discharge and would comply with all California Aboveground Storage Tank (AST) and Underground Storage Tank (UST) regulations and this topic will not be discussed in the main body of the Draft EIR.
- Land Use and Planning. The project would not introduce physical barriers or change existing circulation patterns in a manner that would hinder access to existing communities. As such, the project would not physically divide an established community. The City is in the process of updating its land use and zoning designations and as part of the annexation of the project site into the City of Susanville, the land use and zoning designations will change. Commercial Shopping Center would be the proposed general plan land use designation and General Commercial Shopping District (C-2) would be the proposed zoning. As such, the project would be consistent with the general plan and zoning land use designations upon annexation and this topic will not be discussed in the main body of the Draft EIR.
- Population and Housing; Public Services and Recreation. The project would include various services and amenities, such as a convenience store, fast-food restaurant, and recreational facilities; however, these services and amenities are intended to serve thru-motorists on SR 36 and would not require people to relocate from surrounding communities or lead to population growth in the community necessitating additional emergency services, or recreational facilities. Therefore, the project is not expected to contribute to direct unplanned growth in the City of Susanville and this topic will not be discussed in the main body of the Draft EIR.
- Wildfire: The project site and vicinity are not within a local responsibility area that is classified as a High or Very High Fire Hazard Severity Zone (VHFHSZ) by the California Department of Forestry and Fire Protection. There are no lands within the City that are classified as state responsibility areas or VHFHSZs. Therefore, no impacts related to wildfire are anticipated, and this topic will not be discussed in the main body of the Draft EIR.

ALTERNATIVES TO BE EVALUATED IN THE EIR

In accordance with the State CEQA Guidelines Section 15126.6, the EIR will describe a range of reasonable alternatives to the project that are capable of meeting most of the projects' objectives, and that would avoid or substantially lessen any of the significant effects of the project. The EIR will also identify any alternatives that were considered but rejected by the lead agency as infeasible and briefly explain the reasons why. The EIR will provide an analysis of the No-Project Alternative and will also identify the environmentally superior alternative.

OPPORTUNITY FOR PUBLIC COMMENT

Agencies and interested parties may provide the City with written comments on topics to be addressed in the EIR for the project. Because of time limits mandated by State law, comments should be provided no later than 5 p.m. on **March 5, 2025**. Please send all comments to:

Contact: Dan Newton, City Manager
Phone: (530) 252-5106
Email: dnewton@cityofsusanville.org

Responsible agencies that will need to use the EIR when considering permits or other approvals for the project should provide the name of a contact person, phone number, and email address. Comments provided by email should include "**Susanville Travel Stop**" in the subject line, and the name and physical address of the commenter in the body of the email.

The City will host a virtual EIR Scoping Meeting to gather additional input on the scope (content and focus) of the EIR analysis. The date, time, and access information for the scoping meeting is listed in the section below.

Copies of current and future environmental documents related to the Susanville Travel Stop will be available for review at the following locations:

City Hall
66 N Lassen Street
Susanville, CA 96130

Or online at the following website: https://www.cityofsusanville.net/rooptown/planning/.

All comments on environmental issues received during the public comment period will be considered in the preparation of the Draft EIR, which is anticipated to be available for public review in Summer 2025.

PUBLIC SCOPING MEETING

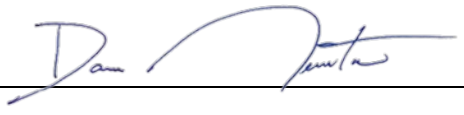
The City will hold a virtual public scoping meeting to inform interested parties about the project, and to provide agencies and the public with an opportunity to provide comments on the scope and content of the EIR. The meeting time and access information are as follows:

February 20, 2025, from 6:00 p.m. to 7:00 p.m.

Join the Meeting Remotely

By Computer: To join the meeting by computer, log in to: https://us06web.zoom.us/j/86894161635?pwd=VS3NdNaaj0nUQRbsBbVJrZaYcBVYxl.1

Telephone Only: To join the meeting by telephone only, dial **1 (669) 444 9171** and use meeting ID: **868 9416 1635** passcode: **404461**.

Signature:  Date: 1/30/2025

Name: Dan Newton

Title: City Manager

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NATIVE AMERICAN HERITAGE COMMISSION

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ACTING EXECUTIVE SECRETARY
Steven Quinn

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

February 4, 2025

Dan Newton
City of Susanville
City Hall
66 N Lassen Street
Susanville CA 96130

Re: 2025011078 Susanville Travel Stop Project, Lassen County

Dear Mr. Newton:

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

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

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

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

AB 52

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

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

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

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

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

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

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

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

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

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

SB 18

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

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

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

NAHC Recommendations for Cultural Resources Assessments

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

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.

b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

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

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

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

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

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

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

If you have any questions or need additional information, please contact me at my email address: Melina.Carlos@NAHC.ca.gov.

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

cc: State Clearinghouse

Outlook

Susanville Travel Station

From Mandy Smith <amsmith77@live.com>
Date Fri 2/7/2025 5:58 PM
To dnewton@cityofsusanville.org <dnewton@cityofsusanville.org>

Good Afternoon, I love the idea of a truck stop in susanville. I consider all the possible positive options and impact from this project. We have thousands of semi trucks come through our city, we also have empty shelves, because semi trucks often run out of driving hours, therefore they need to strategically move through Susanville and deliveries. I also believe, the new jobs and opportunities this will bring to Susanville and Lassen County is desperately needed for our young adults to get job opportunities that we obviously lack in our area. Overall, I am in support of a truck stop in our area. Let's grow for opportunities! Thank you, Mandy Smith 530-310-8877

Outlook

Truck stop

From 4 All-Seasons Self Storage <storage4allseasons@gmail.com>
Date Fri 2/7/2025 6:39 PM
To dnewton@cityofsusanville.org <dnewton@cityofsusanville.org>

Best darn thing that could happen for this town! Day after day I see truckers stopping on the side of Main Street and doing their best to avoid traffic while running across the street to get to the nearest fast food place. It is dangerous for them and for our residents. A truck stop is the best solution. Not to mention the myriad of truckers that don't even bother because there isn't a place for them. Imagine the revenues this city can garner from one simple truck stop.

If it's a vote, this gal votes YES!!

Thanks for all you do,

Outlook

Proposed Travel Stop

From Larry Trotter <sierralarry1949@gmail.com>
Date Sat 2/8/2025 8:52 AM
To dnewton@cityofsusanville.org <dnewton@cityofsusanville.org>

Good Day!
First off, I live in Quincy, over in Plumas County, so I'm not a "local" exactly. But, I would like to comment, if I may.
I believe the idea is a great one! It is a worthwhile, albeit likely rather expensive endeavor. In my view, that facility would be a boon to Susanville, Lassen County and the surrounding areas.
May I suggest that you include, in your design, several vehicle **Electric Charging Stations** that would accommodate all sizes of vehicles, including semi trucks and trailers. Though I do not presently own an electric vehicle (I'm more of a Harley guy), I am an advocate of EV's and believe we will see more and more on the road in the very near future. To be honest, though I've seen a number of these charging stations, I've never actually seen one up close or know how they actually work or how much it costs to charge a vehicle at one.
Anyway, just my 2 cents worth.
Thanks for reading/listening,
Larry Trotter
Quincy, CA

From: Neil Simmons <Neil.Simmons@construction.com>
Sent: Thursday, February 20, 2025 1:04:40 PM
To: Jolene Arredondo <jarredondo@cityofsusanville.org>
Cc: Dodge_Quality <dodge_quality@construction.com>; Vlad Villanueva <Vlad.Villanueva@construction.com>; Herzon Genioso <Herzon.Genioso@construction.com>
Subject: Susanville Travel Stop - Update

Good afternoon Jolene,
I work with Dodge Construction Network, a firm that researches publicly-funded infrastructure projects and contracts for professional services. I'd like to ask about the Susanville Travel Stop project.

1. What is this project's estimated construction cost?

2. Has an architect / engineer already been selected to work on this project's design? If so, who?

3. Who is the Construction Manager / General Contractor / Subcontractor working on this project?
    a. If one hasn't been awarded, when will this project go out to bid?

4. When is construction on this project targeted to begin and finish?

Thanks for the help!

NEIL SIMMONS
National Public Planning Researcher
P 844.326.3826 ext. 7368
DR: 202500070261



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From: Caleb Griffin <lovesteadfarms@gmail.com>
Sent: Monday, March 3, 2025 3:14 AM
To: Dan Newton <dnewton@cityofsusanville.org>
Subject: Public Comment Period - Susanville Travel Stop

Hi Mr. Newton,

A few items in the initial study for the proposed Susanville Travel Stop Project raised some questions, namely the broadly applied "finding of no significant impacts" regarding water quality implications in addition to land classification.

Please see (and download within 10 days) the linked USDA-NRCS Web Soil Survey Report, pulled recently for the Area of Interest identified in the initial study:
https://websoilsurvey.sc.egov.usda.gov/WssProduct/asvfcwpbghlgji5031ituvic/DL_00000/20250303_04243804341_1_Soil_Report.pdf

A few items to note and consider as the city moves forward with the environmental review process:
1) Groundwater levels at this location can be found as shallow as ~130cm below the soil surface.
2) The soil's hydrologic group A designation indicates a very high rate of infiltration, posing potential risks for contamination to the shallow groundwater table, as well as the hydrologically connected Susan river, which downstream irrigation users rely on for growing essential food for our community.
3) The initial study indicates the planning of sub-surface tanks for fuel storage toward the NW corner of the property, but does not clearly define whether and/or how this potential water quality hazard will be secondarily contained.
4) The initial study indicates plans for stormwater catchment systems designed to filter and infiltrate water in a way that poses no significant risks to groundwater and surface water quality, but such details on how these systems will maintain separation from the very shallow water table and interconnected surface hydrology are not explicitly shared.
5) According to USDA, this land is classified as Prime Farmland, if irrigated, despite the initial statement's implied lack of classification under prime farmland or farmland of statewide importance designations.

The above-listed points have stimulated a desire for me to better understand the safeguards in place that are required by law to protect the surface and groundwater resource from contamination. My small family farming operation has invested several tens of thousands of dollars into a nearby farm property, approximately .75 miles downstream from the proposed site location. Our irrigation is exclusively supplied by an on-site well that we rely on for safe and contaminant-free water, so that our family can produce healthy and fresh produce for our greater community.

While I am very excited about the premise of a stimulated local economy and all of the gains a Travel Stop Project would bring to Susanville, I must ask why and how the broadly applied "findings of no significant impact" were reached, and furthermore ask that where appropriate, these stated issues are considered further in the city's environmental review process.

Thank you for your time and consideration, and I look forward to learning more about this project!

Caleb Griffin
Lovestead Farms
(301) 501-1155
Hi

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Northern Region
601 Locust Street
Redding, CA 96001
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

March 3, 2025

Dan Newton
City Manager
City of Susanville
66 N Lassen Street
Susanville CA, 96130

SUBJECT: CITY OF SUSANVILLE TRAVEL STOP PROJECT, NOTICE OF PREPARATION (NOP) OF DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR), STATE CLEARING HOUSE NUMBER 2025011078[1]

Dear Dan Newton:

The California Department of Fish and Wildlife (CDFW) has reviewed the Notice of Preparation (NOP) and Initial Study dated January 2025 for a Draft Environmental Impact Report (DEIR) for the above-referenced project (Project). CDFW appreciates this opportunity to comment on the Project, pursuant to the California Environmental Quality Act (CEQA) Guidelines[2].

CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the state (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Public Resources Code, § 21070; CEQA Guidelines, § 15386, subd. (a)). CDFW, in its Trustee Agency 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.

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. Likewise, to the extent implementation of the Project as proposed may

[1] https://ceqanet.opr.ca.gov/2025011078
[2] 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.

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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.), or state listed rare plants pursuant to the Native Plant Protection Act (NPPA; Fish & G. Code, § 1900 et seq.) authorization as provided by the applicable Fish and Game Code will be required.

PROJECT DESCRIPTION SUMMARY

Lead Agency: City of Susanville

Project Applicant: Lane Engineering, Inc.

Objective: Lane Engineering, Inc. is proposing to construct a full-service travel stop on approximately 14.15 acres of vacant land to the southeast of the City of Susanville. The proposed project includes a travel stop, which would provide professional truck drivers and motorists with 24-hour access to purchase gasoline, diesel, propane, electronic items, snacks, travel items, and food from two fast-food restaurants, one with drive-thru. A dog park, recreational vehicle (RV) dump station, bioretention basins, truck, RV and automobile parking areas and landscaping/lighting are also proposed, along with a 10-space overnight RV park.

Biological Setting: The Project area is located on an approximate 14.15-acre vacant parcel situated to the southeast of the City of Susanville in the Honey Lake Valley. The parcel appears to be comprised of an herbaceous layer, devoid of any trees, with a potential for wetlands. The Susan River flows along the northern parcel boundary of the Project area. The Susan River's riverine, riparian, and wetland habitats are home to an abundant amount of species including, but not limited to, Lahontan Lake tui chub (*Siphateles bicolor pectinifer*, Species of Special Concern [SSC]), Lahontan mountain sucker (*Catostomus Lahontan*, SSC), greater sandhill crane (*Antigone canadensis tabida*, CESA Threatened), Swainson's Hawk (*Buteo swainsoni*, CESA Threatened), Tricolored blackbird (*Agelaius tricolor,* CESA Threatened), bank swallow (*Riparia riparia*, CESA Threatened), western bumble bee (*Bombus occidentalis,* CESA Candidate) and Aleppo avens (*Geum aleppicum*, California Rare Plant Rank 2B.2). The Initial Study indicates wetlands may occur just north of the Project area, the parcel has been previously disturbed and contains State Rank 3 Ashy ryegrass - Creeping wildrye turfs (*Leymus cinereus - Leymus triticoides*) state sensitive natural community.

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Comments and Recommendations
CDFW offers the following comments and recommendations below to assist the Lead Agency in adequately identifying, avoiding, minimizing and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on biological resources.

Biological Assessment
Section 15125, subdivision (c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable CDFW staff to adequately review and provide meaningful and relevant comments to the Lead Agency, the DEIR should include a complete assessment of the flora and fauna within and adjacent to the Project footprint, with particular emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats. The DEIR should include the following information:

A. A thorough, floristic-based assessment of special status plants and natural communities should be included following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities[3] or other comprehensive survey and evaluation. CDFW recommends that floristic, alliance-based and/or association-based mapping and vegetation impact assessments be conducted at the Project site and neighboring vicinity, and at potential mitigation sites for the Project. Adjoining habitat, staging areas, and access areas should be included in this assessment of where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions. Rare plant survey results and impact evaluation should be included in the DEIR.

B. A recent and complete inventory of rare, threatened, endangered, fully protected and other sensitive species on site and within the area of potential effect. Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines, § 15380). CNDDB indicates the occurrence of many special status species within and adjacent to the Project area. The Susan River is a valuable resource to plants and wildlife year-round therefore, seasonal biological variations should also

[3] https://www.wildlife.ca.gov/Conservation/Plants/Info

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be addressed. Focused species-specific surveys should be conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, to accurately assess project impacts on sensitive species. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service. While some species may be assumed present, the completion of protocol-level surveys is important to determine species that are present. CNDDB is not an exhaustive and/or comprehensive inventory of all rare species and natural communities statewide and therefore, species that have not been reported to CNDDB does not negate their potential to occur. CDFW recommends that CNDDB be used as a starting point in gathering information about the potential presence of species within the general area of the Project area. Please visit the CDFW survey guidelines and recommended protocols for plants and special-status species[4] for more information.

CDFW recommends the following CESA-listed species, which have potential to occur, are surveyed by a qualified professional(s) prior to the development and release of the DEIR:

1. Greater Sandhill Crane (SACR)
   SACR nesting occurs in the Honey Lake Basin of Lassen County. According to CNDDB and eBird, several observations of SACR have been recently recorded throughout Susanville and in proximity to the Project area. Therefore, CDFW recommends SACR surveys are performed by a qualified biologist. SACR nesting survey results and impact evaluation should be provided in the DEIR.

   If nesting SACR are detected within proximity to the Project area consultation with CDFW is warranted to discuss how to avoid take and implement appropriate avoidance, minimization, and mitigation measures (AMM's). AMM's should be included in the DEIR in accordance with the Greater Sandhill Crane 5 Year Status Review[5].

2. Bank Swallow (BANS)
   BANS nesting occurs in the Honey Lake Basin of Lassen County. According to CNDDB and eBird, several observations of BANS have

[4] https://wildlife.ca.gov/Conservation/Survey-Protocols
[5] https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=3521

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been recently recorded throughout Susanville along the Susan River. In 2018, a small colony was recorded along the Susan River on the northern boundary of the Project area. Therefore, CDFW recommends BANS surveys are performed by a qualified biologist in accordance with approved survey methodology such as Bank Swallow Survey Methods for the Sacramento and Feather Rivers, California[6]. BANS nesting survey results and impact evaluation should be provided in the DEIR.

If nesting BANS are detected within proximity to the Project area, consultation with CDFW is warranted to discuss how to avoid take and implement appropriate AMM's. AMM's should be included in the DEIR in accordance with the 1992 Bank Swallow Recovery Plan[7], 1995 Bank Swallow Five-Year Status Review[8] and Bank Swallow Conservation Strategy for the Sacramento River Watershed[9].

3. Swainson's Hawk (SWHA)
SWHA nesting occurs in the Honey Lake Basin of Lassen County. According to CNDDB and eBird, several observations of SWHA have been recently recorded throughout Susanville and surrounding landscapes. Aerial imagery indicates potentially suitable nesting habitat for SWHA may occur in proximity to the Project area, and the Project area itself may function as foraging habitat for SWHA. Therefore, CDFW recommends SWHA surveys are performed by a qualified biologist in accordance with approved survey methodology such as Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys[10]. SWHA nesting survey results and impact evaluation should be provided in the DEIR.

If nesting SWHA is detected within proximity of the Project area, and/or the Project area is determined to be suitable foraging habitat with an active SWHA nest within 5 miles, consultation with CDFW is warranted to discuss how to avoid take and implement

[6]https://www.sacramentoriver.org/bans/publications/Bank_Swallow_Survey_Methods_Sacramento_Feather_Rivers_Ver%201.0_Jan2017.pdf
[7] https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2945
[8] https://www.sacramentoriver.org/bans/bans_lib/Five-year%20Status%20Review%20-%20Bank%20Swallow%20(DFG%201995).pdf
[9] https://www.sacramentoriver.org/bans/bans_lib/BANSConsStrat_062813_final.pdf
[10] https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline

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appropriate AMM's. AMM's should be included in the DEIR in accordance with CDFW's Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California[11]. Please note that the primary threat to SWHA continues to be habitat loss, especially the loss of suitable foraging habitat[12].

4. Tricolored Blackbird (TRBL)
   TRBL nesting occurs in the Honey Lake Basin of Lassen County. According to the CNDDB, a breeding colony has been recorded southeast of the Project area in Johnstonville. eBird also indicates several recent TRBL observations with proximity to the Project area. Parts of the Susan River and the agricultural fields surrounding the Project area may provide suitable nesting habitat for this species therefore, CDFW recommends TRBL surveys are performed by a qualified biologist in accordance with approved survey methodology such as Tricolored Blackbird Survey Methods[13]. TRBL nesting survey results and impact evaluation should be provided in the DEIR.

   If a TRBL nesting colony is detected, consultation with CDFW is warranted to discuss how to avoid take and implement appropriate AMM's. AMM's should be included in the DEIR and developed in accordance with CDFW's Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields[14].

C. In addition to the CNDDB, CDFW recommends that other relevant electronic databases such as those maintained by the California Native Plant Society Rare Plant Inventory[15] and U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation[16] (IPaC) are queried for additional species with potential to occur. CDFW's Areas of Conservation Emphasis[17] (ACE) viewer is also available. The ACE maps

[11] https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83992&inline
[12] California Department of Fish and Wildlife (CDFW), 2016. 5-year Status Review: Swainson's hawk (Buteo swainsoni). Prepared for the California Fish and Game Commission. Nongame Bird and Mammal Program 1416 Ninth Street, Sacramento, CA.
[13] https://journal.wildlife.ca.gov/2024/06/06/tricolored-blackbird-survey-methods/
[14] https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=99310&inline
[15] https://rareplants.cnps.org/Home/Index
[16] https://ipac.ecosphere.fws.gov/
[17] https://wildlife.ca.gov/Data/Analysis/Ace

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show the relative biological value of an area compared with all other areas across the state. ACE is a decision support tool used in conjunction with species-specific information and local-scale conservation prioritization analyses. The ACE maps do not replace the need for site-specific evaluation of biological resources and is not recommended for use as the sole measure of conservation priority during planning.

D. A delineation of all wetlands, lakes, streams, and any associated riparian habitats (as defined by the state of California and federally) should be performed and results included in the DEIR. The delineation report should include a preliminary jurisdictional delineation, including wetlands identification pursuant to the U. S. Fish and Wildlife Service wetland definition, as adopted by CDFW. Please note that some wetland and riparian habitats subject to CDFW's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers. In addition to "federally protected wetlands" (see CEQA Appendix G (IV)(c)), CDFW considers impacts to any wetlands (as defined by CDFW) as potentially significant.

E. CDFW recommends review of previous biological technical reports and CEQA documents prepared for other projects in the vicinity, if applicable, to identify biological resources in the area and to perform a cumulative impacts analysis.

F. Habitat connectivity for both plants and wildlife should be determined and assessed for Project impacts. For more information regarding the importance of habitat connectivity, framework for local analyses and implementation, the California Essential Habitat Connectivity Project[18] is recommended for reference.

Biological Direct, Indirect, and Cumulative Impacts

To provide a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts, the following should be addressed in the DEIR:

A. Specific acreages of habitat types that will be impacted due to Project-related activities. Mapping and concise details, including temporary, permanent, direct and/or indirect impacts, should be included.

[18] https://wildlife.ca.gov/Conservation/Planning/Connectivity/CEHC

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B. Potential adverse impacts from lighting, noise, human activity, invasive species, permanent removal or modification of habitat, connectivity, and drainage, among others, may occur. While mitigation measures may be proposed to minimize such impacts, the Lead Agency should make avoidance of impacts a top priority and the minimization of project impacts secondary.

C. Direct and indirect project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands. Impacts on, and maintenance of, wildlife corridors/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the DEIR. Pursuant to CEQA Guidelines, section 15126.2, subdivision (a), impacts associated with initial Project implementation, and long-term operation and maintenance, should be addressed in the DEIR.

D. CDFW also recommends that the DEIR consider future decommission of Project facilities and describe remedial efforts to restore habitat known to be present on the parcel prior to Project initiation.

E. Cumulative effects on biological resources should be developed as described under CEQA Guidelines, section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impact on similar plant communities and wildlife habitats.

F. CDFW recommends that a range of Project alternatives are analyzed to ensure that the full spectrum of alternatives to the proposed Project are fully considered and evaluated, such as identification and analysis of alternatives that avoid or otherwise minimize impacts on sensitive biological resources, in addition to identifying and prioritizing alternatives that maximize environmental benefits.

    a. If the Project will result in any impacts described under the Mandatory Findings of Significance (CEQA Guidelines, § 15065), the impacts must be analyzed in depth in the DEIR, and the Lead Agency is required to make detailed findings on the feasibility of alternatives or mitigation measures to substantially lessen or avoid the significant effects on the environment. When mitigation

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measures or Project changes are found to be feasible, CDFW advises that such measures be incorporated into the Project to lessen or avoid significant effects.

b. CDFW recommends consulting with the USFWS on potential impacts to federal listed species. Take, under the federal Endangered Species Act (ESA), is more broadly defined than CESA; take under ESA 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, to comply with ESA, is recommended. Such consultation would typically occur well in advance of any ground-disturbing activities.

Avoidance, Minimization, and Mitigation of Project-Related Biological Impacts The DEIR should identify avoidance and minimization measures, mitigation measures and alternatives that are appropriate and adequate to avoid or minimize potential impacts, to the extent feasible. The Lead Agency should assess all direct, indirect, and cumulative impacts that are expected to occur as a result of Project implementation and the Project's long-term operation and maintenance. When proposing measures to avoid, minimize, or mitigate impacts, CDFW recommends consideration of the following:

1. *State Fully Protected Species*: Fully Protected Species may not be taken or possessed at any time and no licenses or permits may be issued for their take except as follows: take is for necessary scientific research, efforts to recover a fully protected, endangered, or threatened species, live capture and relocation of a bird species for the protection of livestock, or they are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan (Fish & G. Code, §§ 3511, 4700, 5050, & 5515).

   Specified types of infrastructure projects may be eligible for an incidental take permit for unavoidable impacts to fully protected species if certain conditions are met (see Fish & G. Code, § 2081.15). Project proponents should consult with CDFW early in the project planning process.

   Project activities described in the DEIR should generally be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the Project area. CDFW also

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recommends that the DEIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends that the Lead Agency include in the analysis how appropriate avoidance, minimization, and mitigation measures will reduce indirect impacts to fully protected species.

2. *Sensitive Plant Communities*: CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, and/or alliances and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and evaluated for declines at the local and regional level. Sensitive Plant rank information can be obtained by querying the CNDDB and are included in The Manual of California Vegetation[19]. Sensitive plant communities have the potential to occur within the Project area. The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities, and/or alliances and associations from Project-related if direct and indirect impacts may be significant.

3. *Mitigation for significant impacts*: CDFW recommends the Lead Agency evaluate project-related impacts to sensitive species and habitats for significance at both local and regional ecosystems, and the DEIR should include mitigation measures for significant adverse Project-related impacts to these resources. The DEIR may also describe any beneficial outcomes for sensitive species and habitats in which the Project may result. Mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be considered and discussed in detail. If on-site mitigation is not feasible or is not biologically viable (may not adequately mitigate the loss of biological functions and values) off-site mitigation through habitat creation, enhancement, acquisition and preservation in perpetuity, funding such actions through a conservation fund program such as those managed by the Wildlife Conservation Board[20], or a combination thereof, is recommended.

   The DEIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts to meet mitigation objectives to offset project-induced

[19] https://www.cnps.org/vegetation/manual-of-california-vegetation
[20] https://wcb.ca.gov/Programs

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qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions of access, proposed land dedications, long-term monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc. If sensitive species and/or their habitat may be impacted from the Project, the Lead Agency should include any specific mitigation strategies in the DEIR. CEQA Guidelines, section 15126.4, subdivision (a)(1)(8) states that formulation of feasible mitigation measures should not be deferred until a future date.

CDFW recommends that the DEIR specify mitigation measures that are proportional to the level of impact, in accordance with the provisions of CEQA (CEQA Guidelines, §§ 15126.4, subds. (a)(4)(B), 15064, 15065, and 16355). Mitigation should provide long term conservation value for the suite of species and habitat being impacted by the Project. Furthermore, for mitigation measures to be effective, they need to be specific, enforceable, and feasible actions that will improve environmental conditions.

If mitigation land will be conserved and managed, specific details, such as exact location and acreages of mitigation lands should be described in the DEIR. For proposed preservation and/or restoration, the DEIR should include measures to protect the targeted habitat values from direct and indirect negative impacts in perpetuity, such as a Conservation Easement. An appropriate non-wasting endowment should also be set aside to provide for long-term management of mitigation lands. CDFW strongly recommends that any long-term resource management plan for mitigation land be provided to CDFW and the U.S. Fish and Wildlife Service for review and approval.

4. *Habitat Revegetation/Restoration Plans:* Plans for restoration and revegetation should be prepared by professionals with expertise in northern California ecosystems and native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control

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exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

CDFW recommends that local onsite propagules from the Project area and nearby vicinity are collected and used for restoration purposes. Onsite seed collection should be initiated in advance of Project impacts to accumulate sufficient propagule material for subsequent use in future years. Onsite vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various project components as appropriate.

Restoration objectives should include protecting special habitat elements or recreating them in areas affected by the Project; examples could include retention of woody material, logs, snags, rocks, and brush piles.

5. *Nesting Birds and the Migratory Bird Treaty Act:* Fish and Game Code sections 3503, 3503.5, and 3513 affords these protective measures: Fish and Game Code section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by Fish and Game Code or any regulation made pursuant thereto. Fish and Game Code, section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by Fish and Game Code or any regulation adopted pursuant thereto. Fish and Game Code, section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.).

CDFW recommends that the DEIR include the results of avian surveys, as well as specific avoidance and minimization measures to ensure that

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impacts to nesting birds do not occur. Project-specific avoidance and minimization measures may include, but are not limited to, limited operating work periods (working outside the nesting season), Project phasing and timing, monitoring of Project related noise (where applicable), sound walls, and buffers, where appropriate. The DEIR should also include specific avoidance and minimization measures that will be implemented should a nest be located within the project site. CDFW recommends pre-construction nesting bird surveys be required in the DEIR and should be conducted no more than three (3) days prior to vegetation clearing or ground disturbance activities.

6. *Moving out of Harm's Way:* To avoid direct mortality to any non-listed terrestrial wildlife, CDFW recommends that the Lead Agency condition the DEIR to require that a qualified biologist is retained onsite prior to and during all ground- and habitat-disturbing activities to inspect the Project area prior and during Project activities. Wildlife shall not be harassed and shall be allowed to leave the Project area unharmed. If needed, a qualified biologist may guide, handle, or capture an individual non-listed, non-special-status wildlife species to move it to a nearby safe location within nearby refugium, or it shall be allowed to leave the Project site of its own volition. Capture methods may include hand, dip net, lizard lasso, snake tongs and snake hook. If the wildlife species is discovered or is caught in any pits, ditches, or other types of excavations, the qualified biologist shall release it into the most suitable habitat near the site of capture. Moving wildlife out of harm's way should be limited to only those individuals that would otherwise by injured or killed, and individuals should be moved only as far a necessary to ensure their safety. Only biologists with appropriate authorization by CDFW shall move CESA-listed or other special-status species. Additionally, the temporary relocation of onsite wildlife does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss.

7. The NOP mentions barbed wire fencing around the existing parcel. CDFW understands fences are essential for human safety and the control of trespass, however, inappropriately designed and/or installed fencing may create serious hazards for wildlife. Therefore, CDFW encourages the Lead Agency to consider designing and constructing perimeter fencing with wildlife friendly fencing techniques to reduce the potential of injury or death. Please consult A Landowner's Guide to Wildlife Friendly Fences:

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How to Build Fence with Wildlife in Mind[21] for construction recommendations and use of wildlife friendly fencing. CDFW staff are also available to assist in providing further recommendations for effective wildlife friendly fencing techniques.

8. The NOP mentions landscaping, thus, CDFW encourages landscaping with vegetation native to the local area. Benefits of utilizing native vegetation in landscaping are numerous and include providing vital resources for native wildlife such as hummingbirds and other beneficial pollinators, conserving water, reducing pesticide use, and reducing landscaping maintenance. The California Native Plant Society (CNPS) website includes a variety of useful information and tools to help determine which native species occur in a particular area, information on care and maintenance of native species, and contacts for purchasing native plants or seeds. The CNPS tool Calscape[22] generates a list of native plants that grow in an area based on a specific address and can be used to develop a planting palate for landscaping plans. For more information regarding the importance of using native species in landscaping, please refer to the CNPS Guidelines for Landscaping to Protect Native Vegetation from Genetic Degradation.

California Endangered Species Act

CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to CESA[23]. CDFW recommends that a CESA Incidental Take Permit (ITP) be obtained if the Project has the potential to result in "take" (Fish & G. Code, § 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of state-listed species, either through construction or over the life of the project.

CDFW encourages early consultation, as significant modification to the proposed Project and avoidance, minimization, and mitigation measures may be necessary to obtain a CESA ITP. CDFW must comply with CEQA for issuance of a CESA ITP. CDFW therefore recommends that the DEIR addresses all Project impacts to listed species and specify a mitigation monitoring and reporting program that will meet the requirements of CESA. Based on review

[21] https://fwp.mt.gov/binaries/content/assets/fwp/conservation/land-owner-wildlife-resources/a_landowners_guide_to_wildlife_friendly_fences.pdf
[22] https://calscape.org/
[23] https://wildlife.ca.gov/Conservation/CESA

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of CNDDB and local knowledge of the Project area, CESA-listed species have the potential to occur onsite.

Lake and Streambed Alteration Program
Based on review of material submitted with the NOP, this Project may require notification under Fish and Game Code, section 1602 which requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow.

Upon receipt of a complete notification, CDFW determines if the proposed Project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify a Project that would eliminate or reduce harmful impacts to fish and wildlife resources.

CDFW's issuance of an LSA Agreement is a discretionary action subject to CEQA (see Pub. Resources Code, § 21065). To facilitate issuance of an LSA Agreement, if necessary, the DEIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early coordination with CDFW is recommended since modification of the proposed Project may be required to avoid or reduce impacts to fish and wildlife resources. Please visit CDFW's Lake and Streambed Alteration Program[24] for additional information.

Environmental Data
CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any

[24] https://wildlife.ca.gov/Conservation/Environmental-Review/LSA

Docusign Envelope ID: 1C864E14-6DA9-4720-816E-448322D67F4D

special status species and natural communities detected during Project surveys to the CNDDB using the CNNDB field survey form[25]. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov.

Filing Fees

The Project, as proposed, would have an impact on fish and/or wildlife, and an assessment of filing fees is necessary. Fees are payable upon filing 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 the Lead Agency in identifying and mitigating Project impacts on biological resources. If you have any questions, please contact Erika Iacona, Senior Environmental Scientist, by email at R1CEQARedding@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Robert Hawkins
F8D52F774C764C2...

Robert Hawkins, Acting for
Tina Bartlett, Regional Manager
Northern Region

ec: State Clearinghouse
State.Clearinghouse@opr.ca.gov

Erika Iacona, CDFW
R1CEQARedding@wildlife.ca.gov

Aaron Oliver, Lane Engineering Inc
aaron@laneengineers.com

Eric Ruby, Ascent Environmental
eric.ruby@ascent.inc

[25] http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDB_FieldSurveyForm.pdf

From: Battles, Michael@DOT <Michael.Battles@dot.ca.gov>
Sent: Wednesday, April 2, 2025 1:06 PM
To: Dan Newton <dnewton@cityofsusanville.gov>
Cc: Grah, Kathy M@DOT <kathy.grah@dot.ca.gov>; Clark, Skip@DOT <Skip.Clark@dot.ca.gov>; Babcock, Kelly M@DOT <kelly.babcock@dot.ca.gov>
Subject: Love's Truck Stop---Caltrans Comments on Initial Study

---

Good afternoon Dan,

Thank you for the opportunity to review and comment on the proposed Love's Truck Stop in Susanville. Caltrans staff would like to submit the following comments:

- **Traffic Operations-**The Initial Study for the proposed project states it will include a transportation analysis, including VMT and Operations, which will be submitted for Caltrans review prior to project approval. No comments or conditions at this time.
- **Hydraulics-**Caltrans would like to retract early comments made regarding the floodplain, which stated *"Also, FEMA indicates that this is Zone X (shaded) so a flood study will be required if the developer plans to raise the grade"*. Upon further analysis of the floodplain, a flood study will not be necessary.
    - One more comment from Hydraulics is that on page of the NOP in the Hydrology and Water Quality section, it states "For all construction activities disturbing one acre of land or more, California mandates the development and implementation of Stormwater Pollution Prevention Plan (SWPPP). However, projects that disturb between 1 and 5 acres of soil and have a construction duration of less than one year may be exempt from the CGP through a Rainfall Erosivity Waiver". Further information can be found in the PPDG. Depending on the disturbed area and construction duration, the City of Susanville may quality for this waiver.

Please let me know if there are any questions regarding the above comments. Thanks again Dan for the time extension.

Sincerely,

Mike Battles
Local Development Review Coordinator
Caltrans District 2

County of Lassen
Department of Planning and Building Services
• Planning • Building • Environmental Health • Code Enforcement • Surveyor • Surface Mining

Gaylon F. Norwood, *Acting Director*
707 Nevada Street, Suite 5
Susanville, CA 96130-3912
Main Phone: 530 251-8269
Fax: 530 251-8373
email: landuse@co.lassen.ca.us
website: www.co.lassen.ca.us

Zoning and Building
Inspection Requests
Phone: 530 257-5263

April 4, 2025

Dan Newton, City Manager
66 North Lassen Street
Susanville, CA 96130

By email to: dnewton@cityofsusanville.org

RE: Notice of Preparation, Susanville Travel Stop, Assessor Parcel Number 107-280-017

Dear Mr. Newton:

This letter is in regard to the above referenced Notice of Preparation (NOP) of an Environmental Impact Report (EIR). The purpose of this letter is to provide information regarding the scope of the EIR.

The subject parcel is designated General Industry and Industrial Park in accordance with the Susanville Vicinity Area Plan. The project site itself is entirely within the area designated Industrial Park. Highway 36, in the area of the project, has been designated as a Scenic Corridor in accordance with Lassen County General Plan Policy NR78.

The subject parcel is zoned Heavy Industrial District (M-2)/Limited Industrial District (M-L)(both districts are attached). The project site itself is entirely on the portion of the parcel zoned M-L. The proposed use is not allowed by right or use permit in the subject zoning district. If the application were being processed by Lassen County, a rezone, General Plan amendment and use permit would be required.

Attached to this letter are two documents containing Policies and Implementation Measures from the Susanville Vicinity Area Plan, 1984 and the Lassen County General Plan 2000.

There is currently no sewer service to this parcel, and we do not have any records of installed onsite wastewater treatment systems (OWTS). The project proposes to connect to Susanville Sanitary District, so an OWTS permit is not needed from this Department. We do not have any records of water wells installed on this parcel. The project proposes to connect to the City of Susanville water system, so a water well installation permit is not needed from this Department.

The NOP indicates that aesthetics will not be considered in the main body of the Draft EIR. Instead, it is indicated that aesthetics will be discussed solely in the Initial Study, which will be included as an appendix to the EIR. Due to the fact that the project site is in a scenic highway

corridor and there are residences nearby, and given the applicable goals, policies and implementation measures discussed above and in the attached documents, this Department believes aesthetics should be discussed in the EIR. In particular, the proposed 75-foot tall high-rise sign is not appropriate for the area. This is significantly taller than other signage in the area. The project site is clearly visible from Highway 36 and from Skyline Road and thus signage of that dimension is not needed to advertise the proposed use. Any lighting not associated with the main sign should be shielded.

The aesthetics paragraph of your NOP does not mention the following impacts listed in the California Environmental Quality Act Guidelines Initial Study Appendix:

c) In non-urbanized area, substantially degrade the existing visual character or quality of the site and its surroundings? (Public views are those that are experienced from publically 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?

The above impacts, along with impacts to the scenic corridor, should be included in the aesthetics section of the EIR. The project location is situated on the entrance to the City. As such, it will be the first thing that travelers see when they arrive. Therefore, it is important that the facility and any local branding be aesthetically pleasing (especially with regard to the main sign).

In addition, the proposed sign deviates from sign requirements found within the City of Susanville Zoning Ordinance (Chapter 17.128). Said Ordinance allows for *"one freestanding sign per zone lot, not to exceed 150 square feet in size and 15 feet in height."* The City of Susanville Sign Ordinance does provide the process for exceptions to the sign size limitations, which requires justification. With regard to justification, the Sign Ordinance further states that *"the burden of proof to justify an exception shall be on the applicant to demonstrate that practical difficulties or hardships would otherwise be caused and the exception applied for is the most suitable and effective in relation to the location or terrain of the site or from the stand-point of the intended viewer."*

It is also unclear if the project will deviate from the Sign Provisions regarding lighting. Specifically the Sign Ordinance States in the Color, Lighting and Noise, Section 17.128.130 (C) that

1. *"No blinking, flashing, rotating, revolving or animated signs, or signs that change color or intensity or emit odors, fluids, noise, smoke, etc., shall be permitted on the exterior of any building, except that a portion of a sign used to display time, date or weather information may contain blinking or flashing information related thereto.*

2. Lights used to illuminate signs or advertising structures shall be installed so as to concentrate the illumination on the sign or advertising structure and minimize glare or direct illumination upon a public street or adjacent property.

3. No red, green or amber lights or illuminated signs may be placed in such positions that they could reasonably be expected to interfere with or be confused with an official traffic control device or traffic signal or official directional guide signs."

A discussion should be included in the Initial Study (aesthetics and/or land use) regarding the above requirements and any proposed/needed exceptions.

Last, there is no discussion of vehicles entering the site and /or parked vehicles as a potential source of substantial light or glare. The initial study should include a discussion regarding this potential source.

With regard to Aesthetics broadly, the determinations and findings of no significance appear to be based in part, on what the existing zoning and building codes allows for in terms of maximum activities and impacts, rather than a comparison to existing baseline conditions. CEQA case law is clear that such a comparison is not appropriate, and requires justification to deviate from the accepted practice of comparing a project to existing conditions (e.g. Riverwatch v. County of San Diego).

As further clarified in 2010 within the CBE v. South Coast Case, "The comparison must be between existing physical conditions without the Project, and the conditions expected to be produced by the project. Without such a comparison, the EIR will not inform decision makers or the public of the project's significant environmental impacts, as CEQA mandates."

The Lassen County Planning and Building Services Department recommends the following conditions be placed on the project if approved:

1. In order to operate a retail food facility, the applicant must supply potable water and provide for wastewater treatment.

2. The parcel owner will be required to comply with all requirements for permitting with the Certified Unified Program Agency (CUPA). As proposed the project will need to meet requirements for hazardous material storage, aboveground storage tanks (AST), and underground storage tanks (UST) and obtain Permits to Operate from the Planning and Building Services Department. The USTs will require a plan check and pre-opening inspection prior to issuance of a Permit to Operate.

3. The proposed retail food facilities will each need Permits to Operate from this Department. Each of the proposed facilities will require a plan check and pre-opening

inspection prior to issuance of Permit to Operate. Compliance with the California Retail Food Code must be maintained.

4. The project must demonstrate approval from State of California Housing and Community Development Department for operation of the proposed recreational vehicle (RV) park.

Sincerely,

Gaylon F. Norwood, Acting Director

:gfn
Enclosures: Heavy Industrial Zoning District (County Code Chapter 18.44)
Limited Industrial Zoning District (County Code Chapter 18.40)
Policies and Implementation Measures, Susanville Vicinity Area Plan, 1984
Policies and Implementation Measures, Lassen County General Plan, 2000

x/pla/admin/files/817.07

CHAPTER 18.44
M-2 HEAVY INDUSTRIAL DISTRICT

§ 18.44.010. Intent.

The purpose of the M-2 district is to permit the normal operations of almost all industries, subject only to those regulations needed to control congestion, manage traffic circulation, provide fire and natural hazard protection, to protect the surrounding areas or adjoining premises, to protect those industrial areas from intrusion by nonindustrial activities, and to enhance the land use harmony of the county. A differentiation is made in this district between those uses allowed by right and those allowed by use permit because those requiring use permits have a greater potential for negative impacts to the health, safety and general welfare of the neighborhood and because monitoring those uses will ensure the viability of their uses.
(Ord. 467 § 56, 1984)

§ 18.44.020. Applicability.

The regulations set out in this chapter shall apply to all M-2 districts and shall be subject to Chapters 18.102 through 18.108 of this title.
(Ord. 467 § 56, 1984)

§ 18.44.030. Uses allowed by right.

Uses permitted by right in an M-2 district shall be as follows:

(1) Any use permitted by right in M-1 zones, except those commercial uses permitted pursuant to Section 18.42.035, and except that activities confined to buildings in M-1 zones shall not be so confined in M-2 zones;

(2) Canneries and agricultural processing;

(3) Dairies, creameries and milk bottling or distributing stations;

(4) Storage elevators;

(5) Truck terminals and truck storage;

(6) Ice manufacturing and cold storage;

(7) Manufacturing or assembly of aircraft, automobiles, boilers, engines, motors and generators, mobile homes, trailers, railroad equipment, and other products which require the use of heavy machinery;

(8) Dyeing establishments;

(9) Bottlers, distilleries and wineries;

(10) Metals, glass and paper recycling plants;

(11) Fertilizer production;

(12) Bulk storage of oil, gasoline, propane, and similar products.

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(Ord. 467 § 56, 1984; Ord. 467-Q § 17, 1994; Ord. 467-AC § 20, 2003)

§ 18.44.040. Uses permitted by use permit.

Uses permitted by use permit in an M-2 district shall be as follows:

(1) Junkyard, wrecking yard and automobile dismantling;

(2) Distillation of bones, fat rendering;

(3) Foundries, smelting of ore;

(4) Manufacturing of acid, alcohol, ammonia, asphalt, plastics, rubber, cellulose, cement, coal, dyes, explosives, fertilizer, fireworks, gelatin, glass, tar, paint, plaster, gypsum, flammable fluids or gases, hazardous chemicals including acetylene, carbide, caustic soda, chlorine, cleaning and polishing preparations, creosote, exterminating agents and industrial gases;

(5) Commercial excavation of stone or earth materials;

(6) Drilling for or removal of oil or gas;

(7) Dumping, disposal or reduction of garbage, sewage, offal, dead animals, incineration or refuse;

(8) Airstrips or heliports;

(9) Commercial feed lots, animal auction and sales yards;

(10) Concrete or asphalt batching plants;

(11) Tanneries;

(12) Race tracks for motorized and nonmotorized vehicles, including bicycles, motorcycles, automobiles and similar vehicles;

(13) Power generation plants, all energy sources including biomass;

(14) Sawmills;

(15) Commercial hog raising and poultry raising;

(16) Caretaker's residence; provided, that the permitted use requires the continuous supervision of a caretaker, superintendent or security person and the residence is to be occupied only by such person and his family;

(17) Buildings, structures or edifices requiring heights greater than the maximum allowed.

(Ord. 467 § 56, 1984; Ord. 467-W § 4, 1998; Ord. 467-AC § 20, 2003)

§ 18.44.050. Development standards and area requirements.

Development standards and area requirements in an M-2 district shall be as follows:

(1) Minimum Lot Size. Fourteen thousand square feet;

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(2) Minimum Lot Width. One hundred and ten feet; provided, that no lot shall be greater than four times wider than it is deep or greater than four times deeper than it is wide;

(3) Minimum Front Yard Required. None, except that buildings shall not be less than fifty feet from the centerline of any public roadway;

(4) Minimum Side Yard Required. None, except that it shall be twenty-five feet when adjacent to R zones; this twenty-five-foot minimum shall be increased one foot for every foot over thirty-five feet of building height;

(5) Minimum Rear Yard Required. Ten feet, except that it shall be twenty-five feet when adjacent to R zones; this twenty-five-foot minimum shall be increased one foot for every foot over thirty-five feet of building height, and except that buildings shall not be less than fifty feet from the centerline of any public roadway;

(6) Maximum Building Height Allowed. Seventy-five feet, except that buildings, structures, or edifices over this height may be allowed by use permit.

(Ord. 467 § 56, 1984)

§ 18.44.060. Special provisions.

Special provisions in an M-2 district shall be as follows:

(1) All development shall be subject to design review according to the provisions of this title.

(2) Buildings accessory to the permitted use are allowed, provided they meet the provisions of the development standards and area requirements of this part.

(3) Off-street parking required shall be one space for every three employees on the largest shift or one parking space for every two thousand square feet of gross floor space, whichever is greater. Minimum parking space size shall be nine feet by eighteen feet.

(4) Any off-street parking areas provided in a required front or side yard setback shall be separated from streets and adjacent property by a five-foot-minimum landscaped strip, except when required yards abut, adjoin, or directly face R zones, in which case these required yards shall totally contain a landscaped buffer zone, which shall be designed to buffer and screen the residential uses from the industrial use. For uncovered parking areas with sixteen or more spaces, the minimum landscaping required shall be one tree, within the parking area, of a species suited to the area climate zone for every eight parking spaces to provide shade and visual diversity.

(5) Off-street loading zones required shall be one space for each five thousand square feet apart when on the same side of a public road and five hundred feet apart when on opposite sides of a public road.

(Ord. 467 § 56, 1984; Ord. 467-AC § 20, 2003)

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CHAPTER 18.40
M-L LIMITED INDUSTRIAL DISTRICT

§ 18.40.010. Intent.

The M-L district is designed to provide an environment for aggregation of compatible, non-nuisance type industrial uses, where activities are conducted and confined within the building or structure. It is intended to establish areas where industrial activities, laboratories and clean, quiet operations can function within the context of an industrial park concept. The M-L district is designed to protect these industrial areas from intrusions of incompatible and nonindustrial use, and provide for safety and health considerations by appropriate fire access, circulation, traffic flow, and other standards. Additionally, an aesthetically pleasing environment shall be encouraged.
(Ord. 467 § 55, 1984)

§ 18.40.020. Applicability.

The regulations set out in this subject shall apply in all M-L districts and shall be subject to Chapters 18.102 and 18.108 of this title.
(Ord. 567 § 55, 1984)

§ 18.40.030. Uses allowed by right.

Uses permitted by right in an M-L district shall be as follows:

(1) Administrative, executive, financial and other professional offices;

(2) Bookbinding, lithography, editorial, designing, printing and publishing facilities;

(3) Manufacturing, assembly, printing or packaging of products from previously prepared materials, such as cloth, plastic, paper, leather, wood, glass, metal or stones, but not including such operations as saw and planing mills, steel or iron works or rolling mills or any manufacturing uses involving primary production of commodities from raw materials;

(4) Wholesale storage and distribution of foods and materials, including warehouses, moving services, delivery services and similar uses, but not including storage of flammables, explosives or materials which create dust, odors or fumes;

(5) Research and development laboratories and institutes;

(6) Nonretail dry cleaning plants and laundries;

(7) Television and radio stations;

(8) Fruit and vegetable freezing, processing and packing operations, but not canneries;

(9) Manufacturing of bakery goods, candy and similar products, but not including production of fish or meat products, the rendering of fats or oils or any products whose manufacture may create dust, fumes or obnoxious odors;

(10) Manufacturing of electrical and electronic instruments and devices;

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(11) Small animal hospitals, provided all activities are confined within the building;

(12) Public uses and utilities, not including recreation facilities, disposal sites, sewage treatment and power plants;

(13) Medical and dental laboratories;

(14) Greenhouses;

(15) Cabinet shops;

(16) Retail and wholesale sales in conjunction with allowed uses when directly incidental to the principal use of the property;

(17) Mini-storage;

(18) Day care facilities and other employment center services;

(19) Bottling works, distilleries, breweries;

(20) All other uses similar to those enumerated above, and any light manufacturing or related industrial use, determined by the director of community development, upon presentation of substantial evidence, to be of the same general character as the above permitted uses and compatible with the intent of the district.

(Ord. 467 § 55, 1984; Ord. 467-X § 5, 2000; Ord. 467-AC § 18, 2003)

§ 18.40.040. Uses allowed by use permit.

Uses permitted by use permit in an M-L district shall be as follows:

(1) Retail establishments of a nature designed principally to serve surrounding industrial uses, such as restaurants, snack bars, and the like;

(2) Airstrips and heliports;

(3) Manufacturing of cosmetics or pharmaceuticals;

(4) Uses otherwise allowed within this chapter by right or by use permit which involve an outdoor component including, but not limited to, storage, assembly of parts, play areas (in the case of a day care center).

(Ord. 467 § 55, 1984; Ord. 467-X § 6, 2000; Ord. 467-AC § 18, 2003)

§ 18.40.050. Development standards and area requirements.

Development standards and area requirements in an M-L district shall be as follows:

(1) Minimum Lot Size. Six thousand square feet;

(2) Minimum Lot Width Required. Sixty feet; provided, that no internal lot shall be greater than three times deeper than it is wide or greater than three times wider than it is deep;

(3) Maximum Front Yard Required. Twenty feet, except that buildings shall not be less than fifty feet from the centerline of any public roadway;

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(4) Minimum Side Yard Required. Fifteen feet or ten percent of front lot width whichever is smaller, except that it shall be twenty-five feet when adjacent to R zones;

(5) Minimum Rear Yard Required. Ten feet, except that buildings shall not be less than fifty feet from the centerline of any public roadway and except that the required setback shall be twenty-five feet when adjacent to R zones;

(6) Maximum Building Height Allowed. Forty-five feet.
(Ord. 467 § 55, 1984)

§ 18.40.060. Special provisions.

Special provisions in an M-L district shall be as follows:

(1) All development shall be subject to design review according to the provisions of this title.

(2) Except as otherwise approved by use permit, all uses must be conducted entirely within an enclosed building.

(3) Parking required shall be two off-street spaces for every three employees on the largest shift, except for those uses specifically cited in Chapter 18.104. The minimum parking space size shall be nine feet by eighteen feet. All parking areas shall be paved. For parking areas with sixteen or more spaces, the minimum landscaping required shall be one tree, within the parking area, of a species suited to the area climate zone for every eight parking spaces to provide shade and visual diversity. Additional landscaping may be required in areas abutting public roads on a case-by-case basis.

(4) Any off-street parking areas provided in a required front or side yard setback shall be separated from streets and adjacent property by a five-foot minimum landscaped strip.

(5) There shall be one off-street loading space for each five thousand square feet or remainder portions thereof, of building area, except for buildings greater than ten thousand square feet, two spaces shall be provided and one space for every thirty-five thousand square feet thereafter. The minimum loading space size shall be twelve feet by twenty-two feet. All loading areas shall be paved. The required yard setback shall not be used for parking.

(6) Landscaping shall be established and maintained by the property owner within the required front yard, side yards and rear yard. Landscaping shall be either live or inert.

(7) In the case of mini-storage warehouses, the following shall apply:

(A) Each lot line shall have a landscape screen, stone or masonry wall, or opaque fence at least six feet in height.

(B) Neutral or "earth-tone" colors shall be employed.

(C) Ingress or egress shall be at one point only at the front of the property.

(D) All interior accessways shall be paved.

(E) Accessways along the perimeter of the units shall be twenty-six feet in width.

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(F) In the case of single-faced units, interior accessways shall be twenty feet.

(G) In the case of the double-faced units, interior accessways shall be twenty-six feet.

(8) Building colors employed shall be neutral or "earth tone" and shall be of a nonglare substance.

(Ord. 467 § 55, 1984; Ord. 467-AC § 18, 2003)

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Policy and Implementation from the *Susanville Vicinity Area Plan, 1984* for Susanville Travel Stop

Policy 1.1 Land uses with the 100 year flood plain shall not jeopardize life or property at either a specific site or downstream (pg. 12).

Implementation:

1.11 The types of land uses permitted and County development standards within the 100 year flood plain should conform to the requirements of the National Flood Insurance Program (pg. 12).

1.12 County staff will cooperate with the Department of Water Resources and the Department of Housing and Urban Development (HUD) in identifying 100 year flood plain areas (pg. 12).

1.13 If a project applicant believes that their project site has been improperly included in the HUD maps which identify the 100 year flood plain areas, the burden of proving that the maps are incorrect shall rest with the applicant (pg. 12).

1.14 Land within 100 year flood plain areas should be designated and zoned for agriculture or other low intensity use and/or be zoned within an "F", flood plain combining district (pg. 12).

Policy 3.1 The County shall protect noise sensitive land uses from existing or future noise generators by locating them within compatible noise environments or by requiring noise mitigation measures (pg. 15).

Implementation:

3.11 County planning staff will evaluate the noise potential of proposed projects and their effect on surrounding uses. If the project is incompatible with the surrounding area, it should be directed (generally) to a more compatible area. Conversely, planning staff should encourage noise sensitive uses to locate away from existing noise generators (pg. 15).

3. 12 When new streets are planned, measures such as sound walls or berms should be included to mitigate significant noise impacts (pg. 15).

3.13 New developments shall not exceed the noise standards of the Lassen County General Plan (pg. 15).

3.14 New development locating near noise generators should incorporate design features which will reduce the noise impacts (pg. 15).

3.15 New noise generators shall incorporate design features or devices to reduce the amount of noise which they will emit (pg. 15).

Policy 8.1 Lassen County should protect, maintain and establish scenic corridors in order to preserve the beauty of its landscapes. The scenic corridors designated are shown on the land use map. These corridors shall protect the visual quality of unique scenic resources (pg. 28).

Implementation:

8.11 A public hearing should be held to determine whether the County should request the State to include the scenic corridors described above into the State system of scenic highways (pg.28).

8.12 New development in these corridors should use natural materials and earthtone colors that blend into the landscape (pg.28).

8.13 Billboards with the exception of those noted in implementation measure 8.14, should not be permitted within the corridor because they distract from the scenic quality of the area. Because on-site advertising is sometimes necessary to inform motorists of the location or nature of a commercial enterprise, on-site signs may be allowed if they are simple, easy to read and do not conflict with the landscape (pg.29).

8.14 The County, City and Lassen County Chamber of Commerce should develop standards to allow "clustered" billboards within the scenic corridors such as those uses along Oregon Highways. Clustered billboards allow several advertisers to group their displays on a common billboard (pg.29).

8. 15 Commercial uses along the scenic corridor should be subject to strict design review by the Planning Commission, Board of Supervisors or special design review committee (pg.29).

8.16 Utilities in the scenic corridors should be placed underground whenever possible (pg.29).

Policy 10.1 The County shall preserve and protect the cultural resources of the planning area (pg.33).

Implementation:

10.11 Development projects shall be designed to minimize their impact on cultural resources. Any discoveries of archeological resources during construction, shall be reported for mitigation(pg.33).

10.12 A cultural resources map should be maintained by the County Planning Department and used in the review process of land development projects (pg.33).

10.13 Archeological reconnaissance should be conducted whenever it appears that cultural resources may be disrupted by a proposed development project (pg.33).

Policy 11.1A Lassen County shall conserve and enhance the wildlife and fisheries of the area and preserve and restore the ecological, recreational and aesthetic benefits of the Susan River and its tributaries. 11.1B Areas along the Susan River and Paiute Creek, west of Susanville, are designated as conservation (See land use map for specific location) (pg. 35).

Implementation 11.11 Review all proposed projects for their possible adverse or beneficial impacts to fish and wildlife habitats (pg.35).

Policy : Commercial 18.1 Lassen County shall designate enough land for commercial use to meet existing and future needs of the area's population. However, new commercial uses shall not adversely effect present or future efforts to revitalize Susanville's downtown area (p.44).

Implementation : Commercial 18.11 Permit highway commercial uses only where consistent with the other goals and policies and recommendations of the plan, especially the scenic highways element (pg.44).

Policy : Industrial 19.1A Lassen County shall designate adequate land for industrial land use and shall ensure that adequate facilities (infrastructure) are available for these uses. 19.B The County shall promote the development of quality industrial areas. 19.1C Lands well suited for industrial development because of their transportation access, availability of infrastructure and proximity to similar land uses and geothermal resources shall be kept in an industrial designation. 19.D Encourage the development of industries oriented around the use of geothermal resources where such resources are available (pg.45).

Implementation : Industrial 19.11 The County shall assist appropriate new industries attempting to locate in the planning area. 19.12 Establish a planning process and regulatory atmosphere conducive to attracting and keeping industry in the area. 19.13 Lands designated as industrial on the land use map shall be zoned as follows:

o The land north of the Southern Pacific Railroad tracks to the Susan River should be zoned "M-2", heavy industrial, excepting an area designated Industrial Park along the west side of Highway 36 which should be zoned "M-L", limited industrial.

o The area south of the Southern Pacific Railroad line, east to Sierra Road should be zoned "M-1", limited industrial.

o The area north of the Susan River, south of Riverside Drive should be zoned "M-1", light industrial. o The area north of the Susan River east of Susanville and along the south side of Johnstonville Road East should be zoned "M-2", heavy industrial.

o Frontage along the north side of Johnstonville Road East extending approximately 300 feet in depth should be zoned "M-1", light industrial.

o The existing industrial land uses and corporation yards along the northern perimeter of Susanville, south of the cemetary. This area should be zoned as "M-1", light industrial.

o The land east of Susanville, about one-eighth of a mile south of the sewage treatment plant, should be zoned "M-I", light industrial.

o The area south of Susanville between Sierra Road and Richmond Road should be zoned "M-L", limited industrial (pg. 45).

Policy 20.1A It shall be a policy of Lassen County to provide a transportation system that provides safe and efficient service for the movement of goods and for the travel needs of all citizens. This system shall be used as a means of implementing the economic and environmental goals of the County (pg.47).

Implementation 20.14 The County and City shall establish a truck route plan. The plan should take all reasonable and practical steps to minimize the impact of truck traffic on residential areas and to improve safety. 20.16 Prior to the construction of new roads, the County and City should

evaluate their potential effect on existing traffic patterns and should take any steps necessary to ensure traffic safety 20.17 Encroachments onto State Highways and Thoroughfare routes should be limited and carefully placed to prevent congestion. Developers should utilize existing public connections when feasible and develop frontage roads to minimize the number of additional connections. (pg.48).

Policy 21.1 The extension and enhancement of public facilities into the planning area shall promote and implement the goals, policies, recommendations and land use patterns of this plan (p.49).

Policy 22.1A The City of Susanville should take the lead role in designating, acquiring and developing park and recreational facilities in coordination with Lassen County. Lassen County will provide adequate recreation facilities for both present and future populations (pg.50).

Policy 23.1 The County and the City of Susanville shall establish policy and procedures to guide the orderly transition of land from one jurisdiction to the other. The intent of the policy and procedures shall be the fulfillment of the goals, objectives and policies of this plan (pg.52).

Policy and Implementation from the *Lassen County General Plan, 2000* for Susanville Travel Stop

LU-1 POLICY: This Land Use Element includes the enclosed "Land Use Map" which provides a graphic representation of the land use designations described in this Element and which are referred to in other elements of the General Plan. Special consideration, as described below, shall be given to land located within designated planning areas as described in adopted area plans. Descriptions of the land use designations used on this map and as are used in the County's area plans are included in Section Three of this Element (pg. 2-4).

Implementation Measures:

LU-A The County shall utilize the zoning provisions of the Lassen County Code to adopt and enforce corresponding zoning districts, and to consider the approval of related use permits and land divisions, which implement and are compatible with the policies, general land uses and programs specified in this Land Use Element and in area plans adopted as part of the General Plan (pg.2-4, & 2-5).

LU-B The County recognizes the need and legal requirements for making land use decisions which are consistent with the General Plan (pg. 2-5).

LU-7 POLICY: The County shall consider the land use compatibility implications of proposed changes in land use, including proposed general plan amendments and rezoning, to determine the significance and acceptability of the extent to which proposed changes may affect the pattern and well-being of neighboring land uses (pg.2-7).

Implementation Measure:

LU-F The County shall continue to utilize the California Environmental Quality Act (CEQA) process, when applicable, to evaluate the potential impacts of proposed changes in land uses on surrounding lands and to implement appropriate mitigation measures when needed (pg. 2-7).

LU21 POLICY: The County supports the need to maintain safe and pleasant living environments and, in consideration of related land use decisions, shall require mitigation of impacts which significantly threaten such qualities (pg. 2-11).

LU23 POLICY: The County will continue to utilize design review districts in selected areas in order to ensure that buildings and other substantial developments are designed and constructed so as not to be of unsightly, undesirable or obnoxious appearance to the extent that they will hinder the orderly and harmonious development and appearance of the neighborhood (pg. 2-11) .

LU-O The County will continue to utilize the Design Combining District and related Design Review procedures where and when warranted (pg. 2-11).

LU-P The County will work with affected neighborhoods to develop improved design review standards and guidelines and to help developers, builders, and the public in general understand, appreciate, and fulfill the design qualities and objectives being encouraged. The County may use performance guarantees for development projects to assure completion of related requirements (pg.2-11 & 2-12).

LU26 POLICY: When proposed projects will generate a substantial number of large trucks carrying heavy loads, the County shall require special mitigation measures to insure that those projects do not cause significant deterioration of County roads, or will otherwise mitigate such damage with adequate repair (pg. 2-12).

Implementation Measures:

LU-R Pursuant to impacts evaluated in an environmental impact report or other form of project review, the County may require mitigation measures which will insure that project developers adequately and fairly compensate or participate with the County in the necessary upgrading and/or repair of roads which will be significantly damaged by a project (pg.2-120.

LU28 POLICY: The County shall provide adequate amounts of land in Town Centers which will be designated and zoned to allow and support commercial development (pg. 2-13).

LU29 POLICY: The County supports the economic viability of existing communities and will minimize the development of scattered commercial uses by directing commercial uses to existing town centers and commercial areas or the orderly expansion of such areas, with limited exceptions including home occupations, agricultural-related sales, and specially-considered local convenience and highway commercial sites (pg. 2-13).

LU30 POLICY: The County shall consider, on a case-by-case basis, the need and appropriateness of specially-zoned "local convenience" and "highway commercial" sites at carefully selected points where such commercial development may be warranted, subject to the consideration and approval of an appropriate commercial land use designation and corresponding zoning district requirements. Such proposals shall demonstrate why the related local convenience or highway commercial need can not be adequately satisfied in or adjacent to existing town centers or locations which are already zoned for commercial land uses (pg. 2-13).

LU32 POLICY: The County encourages and will facilitate the development of new, environmentally responsible industrial projects for the economic benefit of the

County (pg. 2-13).

LU33 POLICY: In considering proposals for new industrial sites, including amendments of the County General Plan and related rezoning, the County will address the compatibility of the site with established land use patterns, the adequacy of infrastructure and services, and the consistency of new sites with policies related to the protection of natural resources as addressed in relevant sections of the General Plan (pg.2-13 and 2-14).

LU37 POLICY: The County shall periodically evaluate the impacts of general development trends on public services and, within its authority and in consultation with public service providers, encourage and facilitate mitigation of significant adverse cumulative impacts (pg. 2-15).

Implementation Measures:

LU-T The County shall continue to utilize the CEQA process, when applicable, to evaluate the potential impacts of proposed development projects on existing and desirable levels of public services, and shall require appropriate mitigation measures when needed (pg. 2-15).

LU46 POLICY: The County shall continue to discourage inappropriate development in areas subject to flooding as indicated in the most recent and effective Flood Insurance Rate Maps adopted by the Federal Emergency Management Agency; said maps being hereby incorporated by reference into this Land Use Element (pg. 2-18 and 2-19).

Implementation Measure:

LUCC The County shall continue to comply with and enforce the flood plain management regulations of its Flood Damage Prevention Ordinance, and to participate in the National Flood Insurance Program. This shall include review by the County of proposed project and building permit sites in respect to designated flood hazard areas (pg. 2-19).

LU48 POLICY: In consideration of proposed development within areas subject to flooding, the County shall encourage the use of sites outside of flood prone areas when such alternatives exist and options are feasible (pg. 2-19).

LU49 POLICY: The County supports the management of wildlife resources in ways that enhance the health and abundance of wildlife populations and the diversity of species and their habitats and which, at the same time, balance management policies and program objectives with the range of social and economic needs for which the County is also responsible (pg. 2-19).

NR10 POLICY: The County shall exercise an appropriate degree of regulation designed

to minimize soil erosion, including the administration of standards for grading and site clearance related to development projects (pg. 3-9).

Implementation Measure:

NR-G The County may adopt a grading ordinance to establish standards and permitting processes in addition to enforcement of the Excavation and Grading provisions of the Uniform Building Code to regulate grading projects which could cause or aggravate conditions for soil erosion related to development projects (pg. 3-9 and 3-10).

NR12 POLICY: The County encourages sound soil management and erosion prevention and control programs and projects, including the use of windbreaks, minimum tillage practices, grazing management, and riparian area rehabilitation (pg. 3-10).

NR13 POLICY: The County recognizes the critical importance and future value of its water resources and shall support the conservation of water supplies and protection of water quality (pg.3-13) .

NR14 POLICY: The County supports efforts by state and Federal agencies, including the California Department of Water Resources, to monitor the quantity and quality of the County's water supplies and to protect the water resources of the County when such efforts are demonstrated to be based on sound, scientific assessment of potentially adverse impacts to those resources (pg. 3-13).

NR18 POLICY: The County may adopt specific resource policies and development restrictions to protect specified water resources (e.g., Eagle Lake, Honey Lake, special recharge areas, etc.) to support the protection of those resources from development or other damage which may diminish or destroy their resource value (pg. 3-13 and 3-14).

NR22 POLICY: Plans for reservoirs, flood control facilities and other water supply and flood control programs and projects shall regard the related impacts and cost-benefit relationships to other resource values and land uses which may be affected, and shall consider opportunities and design elements to achieve multiple public benefits including recreation and enhancement of wildlife and fishery resources (pg. 3-14).

NR23 POLICY: The County supports interagency cooperation in developing programs and considering projects to protect people, property and resources from the threat of and damages from flood events (pg.3-14).

NR72 POLICY: The County supports the continued availability of the Eagle Lake trout for sport and recreational fishing, supports improvement of Eagle Lake trout habitat, and opposes proposals for the listing of the species as a threatened or endangered

species (pg. 3-52) .

NR74 POLICY: The Board of Supervisors will continue to consider, adopt and enforce feasible air quality standards which protect the quality of the County's air resources (pg. 3-56).

Implementation Measures:

NR-Q The County will continue to regulate the emission of pollutants within its jurisdiction through the regulations and procedures adopted for the Lassen County Air Pollution Control District (APCB) (pg. 3-56).

NR-R In review of proposed projects pursuant to the California Environmental Quality Act, the County shall consider potential air quality impacts and shall, through the APCB, support appropriate measures for mitigation of significant environmental impacts upon air quality (pg. 3-56.).

NR78 POLICY: The County has identified areas of scenic importance and sensitivity along state highways and major County roads and has designated those areas as AScenic Corridors@. (Refer to the General Plan land use map and related designations in various area plans, which may also be regarded as Ascenic highway corridors@.) The County will develop and enforce policies and regulations to protect areas designated as scenic corridors from unjustified levels of visual deterioration (pg.3-61).

Implementation Measures:

NR-U The County shall adopt policies to minimize adverse impacts which will significantly deteriorate the scenic qualities of visually sensitive areas (pg.3-61).

NR-V Areas designated and zoned for development in scenic corridors shall be zoned as "Design Review Combining Districts" or otherwise regulated to require review and management by the County of the visual impacts of proposed development (pg. 3-61).

NR79 POLICY: The County shall continue to use "Design Review Combining Districts" to review the visual impacts of development in designated areas to minimize significant adverse impacts (pg.3-61).

Implementation Measure:

NR-W The County shall adopt design and development standards for use in "Design Review" areas and scenic corridors to guide the consideration and management of potential significant impacts to scenic resources (pg.3-61).

NR80 POLICY: In the course of adopting policies pertaining to scenic resources in other general plan elements and area plans, the County may consider additional and more particular policies and measures to protect scenic resources and prevent or reduce the adverse visual impacts of development in visually sensitive areas (pg. 3-61 and 3-62).

NR81 POLICY: The County shall maintain and enforce policies, development standards and mitigation measures to control lighting generated by development and to minimize the unnecessary adverse impacts of such lighting in the vicinity of the development and on the general scenic qualities of the night sky in the area (pg. 3-62).

NR82 POLICY: The County will encourage projects within Lassen County but outside the County=s jurisdictional authority to include provisions to minimize the adverse intrusion of lighting on the surrounding area and the night sky in general (pg. 3-62).

AG16 POLICY: Where proposed residential, commercial or industrial development abuts lands devoted to agriculture production, the non-agricultural uses shall be required to incorporate buffer areas to mitigate potential land use conflicts as conditions of approval for subdivisions or use permits. The type and width of buffer areas shall be determined based on the character, intensity and sensitivity of the abutting land uses (pg. 4-9).

Implementation Measure:

AG-J The County will prepare and adopt guidelines and regulations to assist in the determination of the appropriate type and scope of agricultural buffer areas needed in circumstances that warrant the creation of such buffer areas (pg.4-10).

AG22 POLICY: The County shall continue to support Aright to farm@ provisions and shall discourage and minimize the introduction and encroachment of uses which may conflict with agricultural operations or future agricultural development (pg.4-11).

Implementation Measures:

AG-N The County shall apply careful discretion in approving uses and zoning in areas adjacent to agricultural areas which may conflict with agricultural operations or future agricultural development in the area (pg.4-11)

AG-Q The County shall, in compliance with the related policies of this plan which are intended to protect agriculture, incorporate the review criteria set forth in those polices into the County=s application review processes for proposed land uses and rezoning in areas within or adjacent to agricultural

areas (pg. 4-11).

WE-1 POLICY: The County supports the management of wildlife resources in ways that enhance the health and abundance of wildlife populations and the diversity of species and their habitats and which, at the same time, balance management policies and program objectives with the range of social and economic needs for which the County is also responsible (pg. 5-5).

WE-2 POLICY: The County supports the cooperative identification of "areas of significant wildlife value" or similar designations for areas where it is demonstrated by sound biological science that the habitat values are of significant importance to the health and/or survival of one or more species of wildlife. The County may apply a special designation to these areas, and/or agree to support specific resource management objectives, policies and voluntary programs to protect wildlife resources within these areas (pg. 5-5).

Implementation Measures:

WE-A The County will work with local stakeholders including property owners, agricultural organizations, sportsmen groups, applicable state and Federal resource management agencies, and the general public to develop and implement a cooperative "Lassen County Wildlife Resources Management Program". This program, which will be modeled after the Coordinated Resources Management Plan (CRMP) process, will define and identify important wildlife habitats and related issues and propose specific management objectives including objectives which address the current and future condition of resources in these areas. The program will propose policies and actions by which the County, stakeholders and involved agencies can work together to manage related wildlife resources in balance with other land use and resource management objectives (pg. 5-5 and 5-6).

WE-C Information from the California Department of Fish and Game will be used by the County to evaluate potential impacts to fish and wildlife as a result of proposed County policies and land use decisions. The County shall consider recommendations from the Department of Fish and Game and other agencies, special commissions and interested organizations regarding the identification of important wildlife habitat areas and the need for measures by the County, including special general plan amendments and zoning, to provide adequate protection of wildlife resources. Information and related recommendations should be provided in a manner which can be used to formulate protective measures which can be implemented on a programmatic (as opposed to a case-by-case) basis (pg. 5-6).

WE-E In review of project proposals, the County will continue to utilize the California Environmental Quality Act process to evaluate the potential for

significant adverse impacts upon wildlife resources and will require appropriate related project decisions and necessary mitigation measures (pg. 5-6).

WE-4 POLICY: The County recognizes that some areas which are designated and zoned for development, including but not limited to rural residential lands and areas indicated for planned development, may also have wildlife resource and open space values which need to be addressed and considered for protection. The County will address the need for protection of wildlife resources and open space values in areas which are zoned for development during the review of development proposals (pg.5-7).

Implementation Measures:

WE-F The County shall, in consultation with land owners, sports groups, and other concerned groups, agencies and organizations, consider the use of specific resource protection and management tools for wildlife habitat when warranted, including but not limited to the use of: clustered development and conservation subdivisions; conservation easements; building restrictions such as special setbacks; natural vegetation retention requirements; mechanisms to facilitate transfers of development rights; developer credits and density bonuses; >wildlife mitigation funds= with funds to be used for acquisition and/or improvement of wildlife habitat; land dedication to public agencies or land trusts; and habitat banking. When used as mitigation measures, such actions shall be proportional to the magnitude of impacts caused by the project in question (pg.5-7).

WE13 POLICY: The County supports enhanced public access to wildlife resources for hunting and fishing, as well as for recreational and scientific wildlife observation, while respecting private property rights (pg.5-9).

WE16 POLICY: The County supports interagency efforts to protect and restore the wildlife habitat values of lakes, riverine and riparian areas and wetlands (pg.5-9)

Implementation Measure:

WE-H In consideration of proposed projects which may affect lakes, streams, riparian areas or wetlands, the County will review the potential for proposed impacts through the CEQA process and require appropriate mitigation measures to avoid and mitigate significant adverse impacts (pg. 5-10).

WE18 POLICY: The County supports the protection and improvement of the County's fishery resources, including fish stocking of local waters, in concert with related land use and resource management objectives (pg. 5-10).

WE19 POLICY: The County supports the continued availability of the Eagle Lake trout for sport and recreational fishing, and will support efforts to improve habitat, reestablish and improve natural spawning in the Pine Creek watershed, and other steps which will improve the long-term health of the species and avoid listing as a threatened or endangered species (pg. 5-10).

OS17 POLICY: The County shall allow limited recreational uses in designated floodplains, provided that the recreational uses do not interfere with the flood capacity of the area and all facilities comply with established zoning and building permit provisions for land use and construction in floodplains (pg. 6-9).

OS22 POLICY: The County shall discourage development in areas subject to flooding as indicated in the most recent and effective Flood Insurance Rate Maps adopted by the Federal Emergency Management Agency; said maps being hereby incorporated by reference into this Land Use Element (pg. 6-11)

OS23 POLICY: Land within the 100-year flood hazard areas should be zoned for agricultural use or other low intensity uses including recreational uses that can sustain periodic flooding (pg. 6-11).

Implementation Measure:

OS-M The County shall continue to comply with and enforce the flood plain management regulations of its Flood Damage Prevention Ordinance, and to participate in the National Flood Insurance Program. This shall include review by the County of proposed project and building permit sites in respect to designated flood hazard areas (pg. 6-11).

0S24 POLICY: In consideration of proposed development within areas subject to flooding, the County shall encourage the use of sites outside of the flood prone areas when such alternatives exist and options are feasible (pg. 6-11).

OS27 POLICY: The County recognizes that its surface and ground water resources are especially valuable resources which deserve and are in need of appropriate measures to protect their quality and quantity (pg. 6-11).

OS28 POLICY: The County shall, in conjunction with the Water Quality Control Board, adopt specific resource policies and development restrictions to protect specified water resources (e.g., Eagle Lake, Honey Lake, special recharge areas, etc.) to support the protection of those resources from development or other damage which may diminish or destroy their resource value (pg. 6-11 and 6-12).

Implementation Measure:

OS-N When warranted, the County shall consider special restrictions to development in and around recharge areas of domestic water sources and

other special water resource areas to prevent or reduce possible adverse impacts to the quality or quantity of water resources (pg. 6-12).

CE-6 POLICY: The County shall continue to review and, when warranted, formulate improved standards for the necessary improvement and maintenance of roads serving new development, including standards for the incremental improvement or development of public roads (pg. 7-5).

CE10 POLICY: In consideration of proposed projects which would generate a substantial number of large trucks carrying heavy loads, the County shall require special mitigation measures to insure that those projects do not cause, or will adequately mitigate, significant deterioration of County roads (pg. 7-5 and 7-6).

Implementation Measure:

CE-C Pursuant to impacts evaluated in an environmental impact report or other form of project review, the County may require mitigation measures which will insure that project developers adequately and fairly compensate or participate with the County in the necessary upgrading and/or repair of the affected roads (pg. 7-6).

CE13 POLICY: Because the safety and efficiency of traffic on State Route 36 and Main Street through the City of Susanville affects everyone who lives in, works in, and travels through that area of Lassen County, the County encourages continuing efforts by the Lassen County Transportation Commission, Caltrans and the City of Susanville to resolve safety problems and the poor and deteriorating level of service on this portion of the highway (pg. 7-6).

Implementation Measure:

CE-D The County shall work with Caltrans and the local transportation planning agency in the consideration of highway realignments and new public road interchange and frontage road locations and may propose mitigation measures to reduce the adverse impacts of such changes on established town centers and existing and planned land use patterns (pg. 7-6).

CE15 POLICY: Until Highway 395 can be upgraded to a four-lane expressway, the County supports the incremental addition of lanes, including increased numbers of passing lanes, and will work with Caltrans and the local transportation planning agency in the consideration and implementation of access management policies to protect traffic efficiency and safety and to facilitate future highway improvements. Such measures include the limitation of new encroachments onto Highway 395 (pg. 7-7).

CE27 POLICY: When projects are planned, and where a direct nexus between growth and development and the need for trails and pathways is determined, developers

should be required as a condition of project approval to contribute to the development of previously identified public trail projects (pg. 7-9).

NR11 POLICY: The County encourages state and Federal programs and projects designed to reduce soil erosion and to repair areas damaged by erosion (pg. 3-10).

NR12 POLICY: The County encourages sound soil management and erosion prevention and control programs and projects, including the use of windbreaks, minimum tillage practices, grazing management, and riparian area rehabilitation (pg. 3-10).

NR13 POLICY: The County recognizes the critical importance and future value of its water resources and shall support the conservation of water supplies and protection of water quality (pg. 3-13).

NR15 POLICY: The County advocates the cooperation of state and Federal agencies, including the State Water Resources Control Board and its regional boards, in considering programs and actions to protect the quality of ground water and surface water resources (pg. 3-13).

NR18 POLICY: The County may adopt specific resource policies and development restrictions to protect specified water resources (e.g., Eagle Lake, Honey Lake, special recharge areas, etc.) to support the protection of those resources from development or other damage which may diminish or destroy their resource value (pg. 3-13 and 3-14).

NR24 POLICY: The County encourages feasibility studies, planning projects and, when appropriate, the development of new, well-planned reservoirs, flood channels and other facilities and programs which can serve to control flooding and help reduce flood-related damage (pg. 3-14 and 3-15).

NR64 POLICY: The County encourages the development of commercial recreation facilities for the public's use, subject to the determination of the appropriateness and adequacy of specific sites and the mitigation of major land use conflicts and/or significant environmental impacts (pg. 3-51).

NR72 POLICY: The County supports the continued availability of the Eagle Lake trout for sport and recreational fishing, supports improvement of Eagle Lake trout habitat, and opposes proposals for the listing of the species as a threatened or endangered species (pg. 3-52).

NR-R In review of proposed projects pursuant to the California Environmental Quality Act, the County shall consider potential air quality impacts and shall, through the APCB, support appropriate measures for mitigation of

significant environmental impacts upon air quality (pg. 3-56).

NR78 POLICY: The County has identified areas of scenic importance and sensitivity along state highways and major County roads and has designated those areas as AScenic Corridors@. (Refer to the General Plan land use map and related designations in various area plans, which may also be regarded as Ascenic highway corridors@.) The County will develop and enforce policies and regulations to protect areas designated as scenic corridors from unjustified levels of visual deterioration (pg. 3-61).

Implementation Measures:

NR-U The County shall adopt policies to minimize adverse impacts which will significantly deteriorate the scenic qualities of visually sensitive areas (pg. 3-61).

NR81 POLICY: The County shall maintain and enforce policies, development standards and mitigation measures to control lighting generated by development and to minimize the unnecessary adverse impacts of such lighting in the vicinity of the development and on the general scenic qualities of the night sky in the area (pg. 3-62).

NR82 POLICY: The County will encourage projects within Lassen County but outside the County=s jurisdictional authority to include provisions to minimize the adverse intrusion of lighting on the surrounding area and the night sky in general (pg. 3-62).

Appendix B

Phase I Environmental Site Assessment

PHASE 1 ENVIRONMENTAL ASSESSMENT
LOVES TRAVEL STOP & COUNTRY STORE
SOUTHEAST PORTION OF APN 107-280-017
SUSANVILLE, CALIFORNIA

A Report Prepared For:

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Project No. 21166.002
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EXECUTIVE SUMMARY

Reno Tahoe Geo Associates (RTGA) has conducted a Phase I Environmental Site Assessment (ESA) for Love's Travel Stops & Country Stores, Inc. for the subject site located northwest of the intersection of State Route 36 and Skyline Road in Susanville, California. No street address is currently assigned to the property. The site is composed of approximately 15 acres which form the southeast corner of APN: 107-280-017, an 81-acre parcel located in Lassen County, California. For purposes of this report the subject property is limited to only that area designated as the future Loves Travel Stop and Country Store. The subject property is currently undeveloped land. The property dips gently to the east and review of historic aerial photographs shows intermittent meanders and braided drainage channels carrying surface runoff from west to east across the site. A barn with associated outbuildings and a retention pond was present immediately west of the site in the 1941 aerial photograph and was still evident as recently as the 2014 photograph but is not present in the 2016 photograph. Published maps of designated wetlands indicate the eastern border of the site is designated as a type PEM1C (freshwater emergent) wetlands. A shallow bermed former retention basin located near the west-central property is designated as PABFh (freshwater pond) wetlands.

Our review of available aerial photographs and the site visit on January 12, 2022, did not reveal obvious signs of dumping, spilling, leaking, storage or disposal of hazardous materials or wastes on site.

We contracted with a commercial database service, EDR, to review the Federal, State, and local regulatory agency lists for references to the subject site and listings within the appropriate ASTM minimum search distance to the site. The subject site was not listed on regulatory agency databases researched by EDR. Some sites were found within the ASTM search distances, but none pose a significant risk of environmental impairment to the subject site.

In addition, regulatory agencies were contacted to provide additional information about the subject site and surrounding area.

Based on our review of the historical reference documents, site visit, interviews, and the EDR report, our assessment revealed no evidence of recognized environmental conditions (REC's) associated with the subject site.

1 INTRODUCTION AND SCOPE

1.1 Project Description

Reno Tahoe Geo Associates (RTGA) has conducted a Phase I Environmental Site Assessment (ESA) for Love's Travel Stops & Country Stores, Inc. for the subject site located northwest of the intersection of State Route 36 and Skyline Road in Susanville, California. No street address is currently assigned to the property. The site is composed of approximately 15 acres which form the southeast corner of APN: 107-280-017, an 81-acre parcel located in Lassen County, California.

The subject property is currently undeveloped land. We understand this report will assist the Client in understanding environmental conditions associated with the subject site's past and current use. We performed this Phase I ESA in general accordance with the scope and limitations of the American Society of Testing and Materials (ASTM); Standard Practice for Phase I Environmental Site Assessment Process E1527-13 and our proposal, dated November 9, 2021.

The purpose of this assessment is to enable the Client to satisfy one or more of the requirements for the innocent landholder defense to liability under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and to assist the Client in evaluating "recognized environmental conditions" (REC) at the subject site. A REC is defined by the ASTM standard as "the presence or likely presence of hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property." The term includes hazardous substances or petroleum products even under conditions in compliance with laws.

We also assessed *historical* RECs. Historical RECs can be defined as past releases of hazardous substances or petroleum products which have been remediated. The remediation activities must have been satisfactory to the responsible regulatory agency, to such a degree that no further action is mandated.

Authorization

Authorization to proceed with our work on this project was provided by Mr. Kim Van Dyke on November 9, 2021, in the form of a signed service agreement via email.

1.2 Purpose and Scope of Work

The following sections describe the work scope:

- Chapter 2, **Introduction**, includes a discussion of the purpose/reason for performing the Phase I ESA; additional services requested by the Client (e.g., an evaluation of business environmental risk factors associated with the property); significant assumptions (e.g., property boundaries if not marked in the field); limitations, exceptions, and special terms and conditions (e.g., contractual); and user reliance parameters.

- Chapter 3, **Site Description**, is a compilation of information concerning the site location, legal description (if available), current and proposed use of the subject site, a description of structures and improvements on site at the time of our assessment and adjoining property use.

- Chapter 4, **Records Review**, is a compilation of our review of several databases available from the Federal, State, and local regulatory agencies regarding hazardous substance use, storage, or disposal at the subject site; and for off-site facilities within the search distance specified in the ASTM standard. Records provided by the Client are summarized and copies of relevant documents are included in the appendices of this report. Interviews and telephone conversations conducted by us with regulatory agency representatives are included in Chapter 4. Physical setting sources (including topography, soil and groundwater conditions) are also summarized in this section, as is Client-provided information (i.e., title records, environmental liens, specialized knowledge, valuation reduction for environmental issues, and owner, property manager, and occupant information). Other interviews with people knowledgeable about the subject site are included in Chapter 7.

- Chapter 5, **History of the Site**, summarizes the history of the subject site and adjoining properties. This site history is based on various sources which may include: a review of aerial photographs, Sanborn Fire Insurance Maps, city or suburban directories, historical topographic maps, building department records, and results of previous site assessments.

- Chapter 6, **Site Reconnaissance**, describes our observations during the site reconnaissance. The methodologies used and limiting conditions are described.

- Chapter 7, **Interviews**, is a summary of telephone and personal interviews conducted with "Key Site Managers" that may include the owner/manager of the facility, occupants/tenants, local government officials, and the Client. Additional interview sources may be contacted if "Key Site Managers" are not available prior to production of this report and may include adjacent landowners and people with historical knowledge of the area.

- Chapter 8, **Evaluation**, is a presentation of our findings and opinions regarding the information in Chapters 3 through 7 and presents our conclusions regarding the presence of recognized environmental conditions connected with the subject site.

- The ESA does not incorporate non-scope considerations, such as asbestos-containing materials, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, and high voltage power lines.

- Pertinent documentation regarding the subject site is included in appendices of this report.

1.3 Limitations and Exceptions

Phase I ESAs are non-comprehensive by nature and are unlikely to identify all environmental problems or eliminate all risk. The attached report is a qualitative assessment. We offer a range of investigative and engineering services to suit the needs of our clients, including more quantitative investigations. Although risk can never be eliminated, more detailed and extensive investigations yield more information, which may help you understand and better manage your risks. Since such detailed services involve greater expense, we ask our clients to participate in identifying the level of service, which will provide them with an acceptable level of risk. Please contact the signatories of this report if you would like to discuss this issue of risk further.

We performed this environmental assessment in general accordance with the guidelines set forth in the ASTM *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (Designation E-1527-13), and subsequently approved by you, as our client. No warranty, either express or implied is made. Environmental issues not specifically addressed in the report were beyond the scope of our work and not included in our evaluation.

This report may be used only by the Client and only for the purposes stated within a reasonable time from its issuance, *but in no event later than one year from the date of the report.* Land or facility use, on and off-site conditions, regulations, or other factors may change over time, and additional work may be required with the passage of time. Since site activities and regulations beyond our control could change at any time after the completion of this report, our observations, findings, and opinions can be considered valid only as of the date of the site visit. This report should not be relied upon after 180 days from the date of its issuance (ASTM Standard E-1527-05, Section 4.6). Any party other than the Client who wishes to use this report shall notify us of such intended use. Based on the intended use of the report, we may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the Client or anyone else will release us from any liability resulting from the use of this report by any unauthorized party and Client agrees to defend, indemnify, and hold us harmless from any claim or liability associated with such unauthorized use or non-compliance.

2 SITE DESCRIPTION

2.1 Project Description

Access to the site was obtained through the former logging mill/lumberyard west of the site and then east on an unpaved road which somewhat parallels the Susan River. The subject property is currently undeveloped land which is moderately to heavily covered by scrub brush and weeds (Plate 1). Several barbed wire fence lines are present on the property. The site is bordered to the south by Skyline Road which is a former railroad embankment.

The ground under the subject property is described by Wagner and Saucedo (1991) as Quaternary Lake Deposits. The NRCS assigns site soils as Blickenstaff sandy loam. This is described as sandy loam and gravelly sandy loam with 0 to 2 percent slopes, (Map Unit Symbol MUS jc42) within Hydrologic Soil Group A. This deposit is characterized as moderately well drained with a high capacity to transmit water between 2.00 to 6.00 inches per hour. Borehole drilling at the site indicated surface deposits are composed primarily of 5 to 8 feet of high plasticity clay which grades laterally into silty sand and sand/silt mixtures in the northeast portion of the site. High plasticity clays are consistent with lakebed deposits whereas silty sands probably represent overbank sedimentary deposits of the Susan River. Soft clays were also present between 15 to 20 feet and at 30 feet depths.

Groundwater was encountered at depths of 18 to 20 feet during geotechnical assessment drilling. Some locations of perched water at depths as shallow as 6 feet were also noted. Surface ponding was noted at the southeast corner of the site during the field investigation due to recent snowmelt runoff.

2.2 Location and Legal Description

The information presented in Table 2-1 describes the physical location, legal description, and the current usage of the subject site. This information was obtained from review of various maps, aerial photographs and public records at city and/or county offices, interviews and information provided by the client.

Table 2-1: Location, Description, and Ownership

Parameter	Information/Comments
ADDRESS	Unassigned
LOCATION	Northwest of the intersection of State Route 36 at the intersection of Skyline Road, south of Susanville, California
TOWNSHIP & RANGE	NW1/4 of SE1/4 of Township 29 North, Range 12 East, Section 4
ASSESSOR'S PARCEL NUMBER	APN: 107-280-017, Lassen County
LEGAL DESCRIPTION	OLD 107-280-02 LLA 2017 - 04810
ACREAGE	Approximately 15

2.3 Description of Structures/Improvements

The project site is currently vacant and unused.

2.4 Current Uses of Adjoining Properties

On January 12, 2022, RTGA conducted a brief survey of the properties immediately adjacent to the subject site. The subject site is bordered to the north by the Susan River, to the west by currently undeveloped land, to the south by Skyline Road, and to the east by California State Route 36. A summary of the surrounding properties is presented in Table 2-2.

Table 2-2: Adjoining Properties

Direction	Land Use Description
North	Susan River
South	Skyline Road
East	California State Route 36
West	Vacant land with a former lumber mill (Old SPI Mill) beyond

3 RECORDS REVIEW

3.1 Standard Environmental Record Sources

The purpose of the records review is to obtain and review records that would help to evaluate RECs of potential concern in connection with the subject site and bordering properties.

Federal, State, and local regulatory agencies publish databases or "lists" of businesses and properties that handle hazardous materials or hazardous waste or are the known location of a release of hazardous substances to soil and/or groundwater. These databases are available for review and/or purchase at the regulatory agencies, or the information may be obtained through a commercial database service. We contracted with a commercial database service, EDR, of Milford, Connecticut to perform the government database search for listings within the appropriate ASTM minimum search distance to the subject site. A description of the types of information contained in each of the databases reviewed and the agency responsible for compiling the data is also included in the EDR Radius Report. The EDR database search results are included in Appendix B and are summarized on Table 3-1 and Table 3-2.

Table 3-1: Federal Records Review-Search Distance

FEDERAL	DISTANCE
EPA National Priority List (NPL)	1-mile
Comprehensive Environmental Response Compensation Liability Information System (CERCLIS)	½-mile
CERCLIS-NFRAP (No Further Remedial Action Planned)	½-mile
Resource Conservation Recovery Act (RCRA)-CORRACTS TSDF	1-mile
RCRA-non CORRACTS TSD	½-mile
RCRA-GEN	¼ -mile
ERNS	Site
US Engineering Controls, US Institutional Controls	½ -mile

Table 3-2: State/Local Records review-search distance

STATE/LOCAL	DISTANCE
State Hazardous Waste Sites (SHWS)	1-mile
State Landfill	½-mile
Leaking Underground Storage Tank (LUST)	½-mile
Brownfields	½-mile
Above Ground Storage Tank (AST)	¼ -mile
FINDS	Site & adjoining
Underground Storage Tank (UST)	¼ -mile

3.2 Results of Database Search

The following sections contain information on the results of EDR's record search.

3.2.1 Subject Site

No reports of recognized environmental conditions (REC's).

3.2.2 Facilities Listed Within 1/8-mile of Subject Site

None

3.2.3 Additional Sources

The following additional sources of environmental records were reviewed during this Phase I ESA for the purposes of meeting the ASTM standard. Local regulatory agencies were contacted for reasonably ascertainable and practically reviewable documentation regarding RECs present at the subject site and adjacent facilities. Interviews with local regulatory agency representatives are included in Chapter 7 of this report. The following agencies were contacted for documentation.

Lassen County Assessors Department
Lassen County Building Department
Lassen County Environmental Health Department
Lahontan Regional Water Quality Control Board
U.S. Environmental Protection Agency www.epa.gov/echo

The overview and detail maps from the EDR report are included in the figure section of the report as Plates 3 and 4.

Lassen County Assessors Department

Review of Lassen County Assessors Department files do not indicate any RECs at the subject site.

Lassen County Building Department

No documents were found at the Lassen County Building Department. According to department personnel only records dating back to the mid 1970's would be on file.

Lassen County Environmental Health Department

No documents were found at the Lassen County Environmental Health Department.

Lahontan Regional Water Quality Control Board

No sites were found in the Lahontan Regional Water Quality Control Board Geotracker website within one mile of the site.

3.3 Physical Setting Source(s)

Table 3-3 presents information about the physical setting of the site. This information was obtained from published reports.

Table 3-3: Physical Setting Sources

USGS TOPOGRAPHIC QUADRANGLE	Susanville and Johnstonville Quadrangles, 7.5 Minute Series (Topographic), 2018.	The subject site is located at an approximate elevation of 4,153 feet above mean sea level (msl) and the topographic relief slopes to the east towards SR 36, eventually draining north to the Susan River.
GEOLOGIC MAP	Geologic Map of the Susanville Quadrangle, Lassen and Plumas Counties, California, DMG OFR 91-1, 1:100,000	The ground under the subject property is described by Wagner and Saucedo (1991) as Quaternary Lake deposits.
SOIL TYPE	USDA, NRCS Soil Survey (http://websoilsurvey.nrcs.usda.gov/)	The NRCS assigns site soils as Blickenstaff sandy loam. This is described as sandy loam and gravelly sandy loam with 0 to 2 percent slopes, (Map Unit Symbol MUS jc42) within Hydrologic Soil Group A.
OIL AND GAS FIELDS	Division of Oil and Gas Website (www.consrv.ca.gov/dog)	Published maps available from the Department of Conservation, Division of Oil, Gas, and Geothermal Resources did not include the subject site, suggesting that oil and gas fields are not located in the vicinity of the subject Site.
WETLANDS	U.S. Fish and Wildlife Service Website (www.https:/fws.gov/wetland/data/mapper.html)	Published maps of designated wetlands indicate the eastern border of the site is designated as a type PEM1C (Freshwater Emergent) wetlands. The bermed retention basin is listed as PABFh (freshwater pond) wetlands.

Information about the regional geology is presented on Table 3-4. This information was obtained from published data and maps, interviews with public agencies, and/or from previous investigations conducted by us in the vicinity of the subject site.

Table 3-4: Regional Geology and Hydrogeology

Physical Parameter	Information/Comments
DEPTH TO REGIONAL GROUNDWATER	Groundwater was encountered at depths of 18 to 20 feet during geotechnical drilling. Occasional perched groundwater due to surface infiltration being intercepted by low permeability layers, was also encountered at shallower depths. General groundwater depth may be influenced by local pumping, rainfall, and snowmelt.
DIRECTION OF ANTICIPATED FLOW	The direction of groundwater flow is anticipated to be north-northeast towards the Susan River.
WATER SUPPLY (Site Reconnaissance, EDR report)	The EDR report indicates 59 wells including water supply wells and monitor wells are within ½ to 1 mile of the site. No water supply or monitor wells are known to exist on the project site.
FLOOD ZONE DESIGNATION (Source: FEMA National Flood Hazard report)	The subject site is designated shaded Zone X; Areas with 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot, or with a drainage area of less than 1 square mile.

3.4 User Provided Information

The user did not provide any additional information for review.

3.5 Environmental Liens

According to the database search, no environmental liens are known that have been placed on the subject site (Appendix C1). The property tax report is also presented in Appendix C1.

3.6 Value Reduction

As part of the ASTM E 1527-13 process, information must be gathered regarding the prospective purchase price of the property relative to the fair market value of the subject site. We have no indication that the purchase price has been discounted due to any environmental degradation of the property.

4 HISTORICAL USE OF THE PROPERTY AND ADJOINING PROPERTIES

The history of the subject site was researched to identify obvious uses. Historical land use was researched to the first developed use. Table 4-1 summarizes the availability of information reviewed during this assessment.

Table 4-1: Historical Sources

	Years reviewed	Availability
Aerial Photographs	2019, 2016, 2014, 2012 2009, 2006, 1998, 1981, 1978, 1967, 1957, 1951, 1941	Readily available from EDR, 2021 and Google Earth
City Directories	1990, 1995, 2000, 2005, 2010, 2014, 2017	Readily available from EDR, 2021
Historical Topographic Maps	2018, 2015, 2012, 1995, 1988, 1975, 1954	Readily available from EDR, 2021
Sanborn Fire Insurance Maps	None	No coverage of the subject site
Previous Assessments	None	

4.1 Aerial Photographs

A review of historical aerial photography may indicate past activities at a subject site that may not be documented by other means or observed during a site visit. The effectiveness of this technique depends on the scale and quality of the photographs and the available coverage. Aerial photographs were obtained from several historical photograph collections through EDR and Google Earth. Aerial photographs covering 78 years were available during the time frame that this report was being prepared. A summary of the aerial photographs reviewed is presented in Table 4-2. Copies of the reviewed aerial photographs from EDR are included in Appendix C2.

Table 4-2: Aerial Photographs

Year	Approximate Scale	Type	Sources	Quality
1941	1" = 500'	Black and white	EDR, 2021	Fair
1951	1" = 500'	Black and white	EDR, 2021	Fair
1957	1" = 500'	Black and white	EDR, 2021	Fair
1967	1" = 500'	Black and white	EDR, 2021	Good
1978	1" = 500'	Color	EDR, 2021	Good
1981	1" = 500'	Color	EDR, 2021	Fair
1998	1" = 500'	Color	EDR, 2021	Good
2006	1" = 500'	Color	EDR, 2021	Good
2009	1" = 500'	Color	EDR, 2021	Good
2012	1" = 500'	Color	EDR, 2021	Good
2014	1" = 500'	Color	Google Earth	Good
2016	1" = 500'	Color	EDR, 2021	Good
2019	1" = 500'	Color	Google Earth	Good

Note 1: Aerial photographs only provide information on indications of land use and no conclusions regarding the release of hazardous substances or petroleum products can be drawn from the review of photographs alone. The subject site boundaries were approximated because physical features were not always readily apparent.

The subject site was undeveloped in the 1941 photographs, although what appears to be a barn with several outbuildings is present immediately west of the site**.** The 1951 photograph shows the presence of a bermed retention basin associated with the barn which is present near the western property boundary. The retention basin appears to intercept flow from a shallow drainage which flows west to east approximately parallel to Skyline Road. The buildings are still present in the 3/20/2014 Google Earth photograph but are absent by 8/20/2019. The bermed retention basin is still evident today.

Review of these aerial photographs do not indicate any RECs.

4.2 City Directories

City directories are located in Appendix C3.

No entities for APN: 107-280-017 are listed:

Review of these records do not indicate any RECs.

4.3 Historical Topographic Map Review

We contacted EDR for information regarding historical topographic maps of the subject site vicinity. The topographic maps reviewed from this assessment are listed in Table 4-3 and contained in Appendix C4.

Table 4-3: Historical Topographic Maps Reviewed

Year	Quadrangles	Series	Scale
1954	Susanville	15 minute	1:62,500
1975	Susanville NE	7.5 minute	1:24,000
1988	Susanville & Johnstonville	7.5 minute	1:24,000
1995	Susanville	7.5 minute	1:24,000
2012	Susanville & Johnstonville	7.5 minute	1:24,000
2015	Susanville & Johnstonville	7.5 minute	1:24,000
2018	Susanville & Johnstonville	7.5 minute	1:24,000

In 1954, land use immediately surrounding the subject site was depicted as undeveloped with the exception of the previously mentioned residence, outbuildings, and retention basin. Railroad tracks are shown along the alignment of what is now Skyline Road along the southern site border and State Route 36 has not yet been constructed. The 1975 map does not show the actual site area. The railroad tracks and SR 36 are shown on the 1988 map. The 2012, 2015, and 2018 topographic maps show SR 36 and the retention pond but no other site related features.

4.4 Previous Assessments

No previous assessments were reviewed for the subject site.

5 SITE RECONNAISSANCE

Our assessment activities included a site reconnaissance. This section summarizes the findings from the site reconnaissance.

5.1 Methodology and Limiting Conditions

Mr. Premakumaran Arunan of RTGA, conducted a site reconnaissance on January 12, 2022, to assess and photograph present subject site conditions. Weather at the time of the site visit was sunny and cool with a slight breeze.

The approximate subject site boundaries are shown on Figure 1, Site Map. Color photographs of the subject site are presented on Plates 5 through 6. The subject site conditions discussed below are limited to readily apparent environmental conditions observed.

5.2 General Site Setting

No street address is currently assigned to the property. The site is composed of approximately 15 acres which form the southeast corner of APN: 107-280-017, an 81-acre parcel located in Lassen County, California. For purposes of this report the subject property is limited to only that area designated as the future Loves Travel Stop and Country Store. The subject property is currently undeveloped land. The property dips gently to the east and review of historic aerial photographs shows meanders and braided drainage channels which carry intermittent surface runoff from west to east across the site. A former barn with associated outbuildings and a retention pond was present immediately west of the site in the 1941 aerial photograph and was still evident as recently as the 03/20/2014 Google Earth photograph but is not present in the 08/20/2019 photograph. Published maps of designated wetlands indicate the eastern border of the site is designated as a type PEM1C wetlands.

Our review of available aerial photographs and the site visit on October 22, 2021, did not reveal obvious signs of dumping, spilling, leaking, storage or disposal of hazardous materials or wastes on site.

No spills or releases were noted on the site during the January 12, 2022 site visit.

Site observations are summarized in Table 5-1 and Table 5-2.

Table 5-1: General Site Observations

General Observations	Remarks	Observed	Not Observed
Current Use	Vacant	X	
Current use likely to indicate RECs	No		X
Past Use	None		X
Past use likely to indicate RECs	No		X
Structures	None	X	
Roads	Unpaved and un-named dirt road leading east from the former lumber mill west of the site.	X	
Topography of site and surrounding area	Gently east sloping	X	

Table 5-2: Interior and Exterior Observations

Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		Observed	Not Observed
Aboveground storage tank (AST)			X
Air Emissions			X
Asbestos and lead			X
Below grade vaults			X
Burned or buried debris			X
Chemical storage			X
Chemical mixing areas			X

Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		**Observed**	**Not Observed**
Discolored soil or water			X
Ditches, streams	Shallow meandering drainages cross the site carrying flow from west to east.	X	
Drains and piping *(e.g., floor drains, floor trenches, bay drains, sand traps, grease traps)*			X
Drums			X
Electrical or hydraulic equipment (Polychlorinated biphenyls [PCBs])			X
Farm waste (*e.g., feedlot spoils or manure stockpile*)			X
Fill dirt from an unknown source.			X
Fill dirt from a known source			X
Hazardous chemical and petroleum products in connection with *known* use.			X
Hazardous chemical and petroleum products in connection with *unknown* use.			X
Non-hazardous containers with contents			X
Hazardous waste storage			X
Heating and cooling system and fuel source			X
Industrial waste treatment equipment			X
Loading and unloading areas			X
Odors			X

Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		**Observed**	**Not Observed**
Pits, ponds, or lagoons	Shallow bermed runoff retention basin near west-central boundary	X	
Pools of liquid			X
Process wastewater			X
Sanitary sewer system			X
Septic system (*e.g., tank and leach fields*)			X
Soil piles			X
Solid waste/evidence of unauthorized dumping			X
Stained pavement, soil or concrete			X
Stains or corrosion (*interior, non-water)*			X
Storm drains/catch basins	Shallow bermed runoff retention basin near west-central boundary	X	
Stressed vegetation			X
Sumps and clarifiers			X
Surface water			X
Underground storage tank(s) (including heating oil tanks)			X
Unidentified substance containers			X
Utilities			X
Wastewater discharge			X
Water supplies (*potable and process*)			X

Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		Observed	Not Observed
Wells (*irrigation, monitoring, or domestic*)			X
Wells (*dry*)			X
Wells (*Oil and Gas*)			X

5.3 Results of Site Reconnaissance

Based on the observations made during the site reconnaissance on January 12, 2022, no RECs were noted.

5.4 Laboratory Testing

As part of the site-specific geotechnical assessment, 19 boreholes were drilled, and samples collected for laboratory analysis to establish engineering parameters. These will be reported in the site-specific geotechnical report. No samples were subjected to environmental testing.

6 INTERVIEWS

Key site managers were contacted to obtain current and historical environmental information concerning the subject site. The following sections highlight information revealed during the interviews.

6.1 Interviews with Government Agencies

A telephone call to the Lassen County Building Department resulted in information regarding former site history and the former lumber mill west of the site. Mrs. Kelley Himman of the Building Department is a long-time resident of Susanville and was an employee at the former lumber mill. Mrs. Himman provided information regarding the lumber mill operations. She stated that a small settling pond which existed on the east side of the lumber mill property caught runoff from the "log deck" where raw timber was staged prior to milling. She also remembered the barn and outbuildings which use to exist on the parcel, west of the subject property, and stated it had burned down "a few years ago". Search of the Lassen County Recorder's Office did not return any results related to the subject property.

7 EVALUATIONS

We performed this ESA of the subject site in conformance with the scope and limitations of ASTM Practice E1527-05. The following sections describe our findings and provide general background information about the subject site. Findings include RECs, historical RECs, and de minimus quantities, as applicable to the subject site. In summary, our assessment revealed the following information about the subject site. This report was prepared in general accordance with the American Society of Testing and Materials (ASTM), *Standard Practice for Phase I Environmental Site Assessment Process* E1527-13.

7.1 Background

The subject site consists of a currently unused vacant lot.

7.2 Findings and Opinions

The history of the site was reviewed to identify obvious uses of the site from the present to first developed use, or back to 1940, whichever is earlier, from readily available resources. Aerial photographs only provide information on indications of land use and no conclusions can be drawn from photographs alone. Multiple fences on the property suggest the site was once fenced pastureland.

Our review of available aerial photographs and the site visit on January 12, 2022, did not reveal obvious signs of dumping, spilling, leaking, storage or disposal of hazardous materials or wastes on site.

We contracted with a commercial database service, EDR, to review the Federal, State, and local regulatory agency lists for references to the subject site and listings within the appropriate ASTM minimum search distance to the site. The subject site was not listed on regulatory agency databases researched by EDR. Some sites were found within the ASTM search distances, but none pose a significant risk of environmental impairment to the subject site.

In addition, regulatory agencies were contacted to provide additional information about the subject site and surrounding area.

Based on our review of the historical reference documents, site visit, interviews, and the EDR report, our assessment revealed no evidence of recognized environmental conditions (REC) associated with the subject site.

No other potential REC's were noted in the site area.

7.3 Deviations and Additional Services

The ESA does not incorporate non-scope considerations, radon, lead-based paint testing, lead in drinking water testing, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, and high voltage power lines.

7.4 Data Failure

EDR does not have access to building permit information for Lassen County. RTGA contacted the Lassen County Building Department for information related to any permits issued for the subject parcels. No building permits were recorded for the subject property.

8 CERTIFICATION

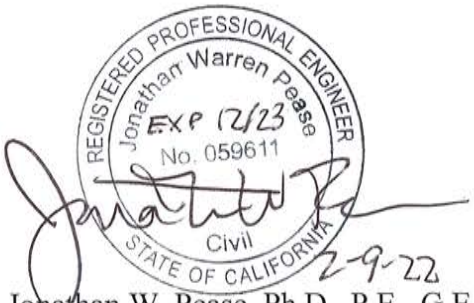
Information, conclusions, and recommendations in this document have been prepared under the supervision of and reviewed by a California Registered Professional Engineer.

I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete.

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state, and local statutes, regulations, and ordinances.



David J. Herzog, C.E.G. #1295
Senior Engineering Geologist



Jonathan W. Pease, Ph.D., P.E., G.E
Principal Engineer

Shane Mulvaney
Senior Geologist

9 LIMITATIONS

This report has been prepared for the specific purpose identified herein at the request of and for the use of the Client. Observations, conclusions, and recommendations contained herein are opinions based upon the scope of services, information obtained through observations and measurements taken by RTGA at certain points and certain times, and interpretation and extrapolation of secondary information from published and unpublished material. The report may infer the configuration of strata, ground and groundwater conditions both between data points and below the maximum depth of investigation. The report also may deduce temporal trends and averages for climatic, hydrological and water quality parameters. Such interpretations and extrapolations are only indicative, and no liability is accepted for variations between the opinions expressed herein and conditions which may be identified at a later date through direct measurement and observation.

Unless otherwise agreed in writing by RTGA, we accept no responsibility for any use of, or reliance on any contents of this report by any person other than Client and shall not be liable to any person other than Client, on any ground, for any loss, damage or expense arising from such use or reliance.

Should any information contained in this report be used by any unauthorized third party, it is done so at their own risk.

PLATES

Provided by:
PARCELQUEST

THIS MAP IS INTENDED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA PROVIDED.

107 - 28

1" = 600'

1.	S. 66°58'09" W.	145.00'
2.	S. 36°00' 19" W.	225'
3.	S. 20° 26' E.	655.67'
4.	S. 44°18-1/2' E.	220.38'
5.	S. 60° 37-1/2' E.	342.05'
6.	S. 46°56-1/2' E.	150.75'
7.	S. 14° 46-1/2' E.	180.95'
8.	S. 78°28' E.	299.03'
9.	N. 75° 19' E.	320.45'
10.	S. 58°4-1/2' E.	313.54'
11.	S. 35°13'53" E.	567.83'
12.	S. 75°22'59" E.	221.02'

P.M. Map Bk. 25 Pg. 77, 78 SIERRA PACIFIC IND.
R.S. Map Bk. 40 Pg. 98-100 " " "
R.S. Map Bk. 44 Pg. 78 SIERRA PACIFIC IND.
R.S. Map Bk. 45 Pg. 4 SIERRA PACIFIC IND.

Assessor's Map Bk 107-Pg 28
County of Lassen, Calif.

NOTE - Assessor's Parcel Numbers Shown in Circles.

generated by PARCELQUEST



0 200 400

SCALE: 1"= 200'

Reno Tahoe Geo Associates, Inc.

P.O. Box 18449
Reno, Nevada 89511

CONSULTING CIVIL ENGINEERS

TEL (775)853-9100
FAX (775)853-9199

JOB # 21166.002 APPR:_____ DATE: 2/10/2022

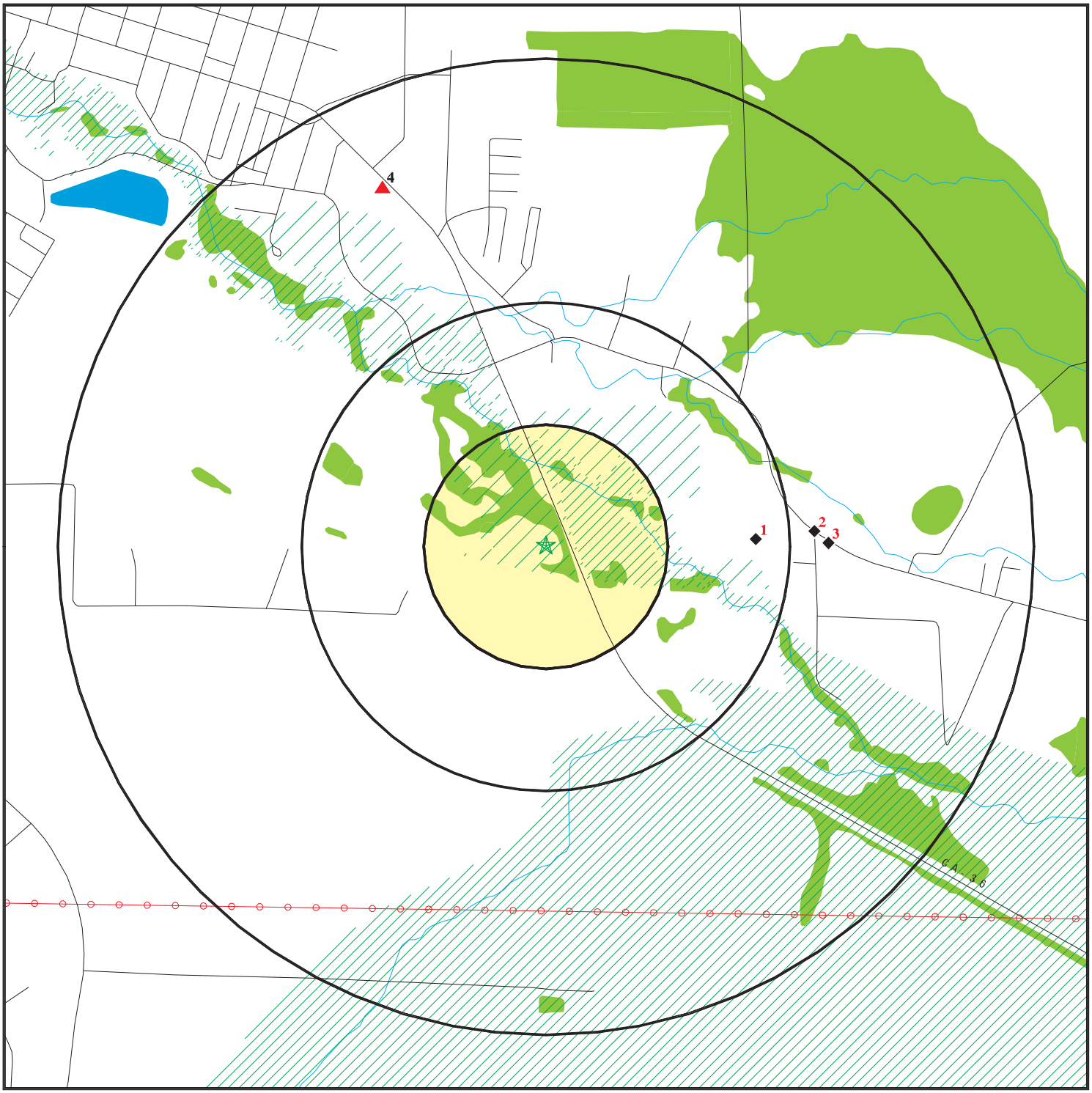
SITE PLAN

PHASE 1 ENVIRONMENTAL ASSESSMENT
LOVES TRAVEL STOP
SUSANVILLE

LASSEN COUNTY CALIFORNIA

PLATE 2

OVERVIEW MAP - 6821013.2S



0 1/4 1/2 1 Miles

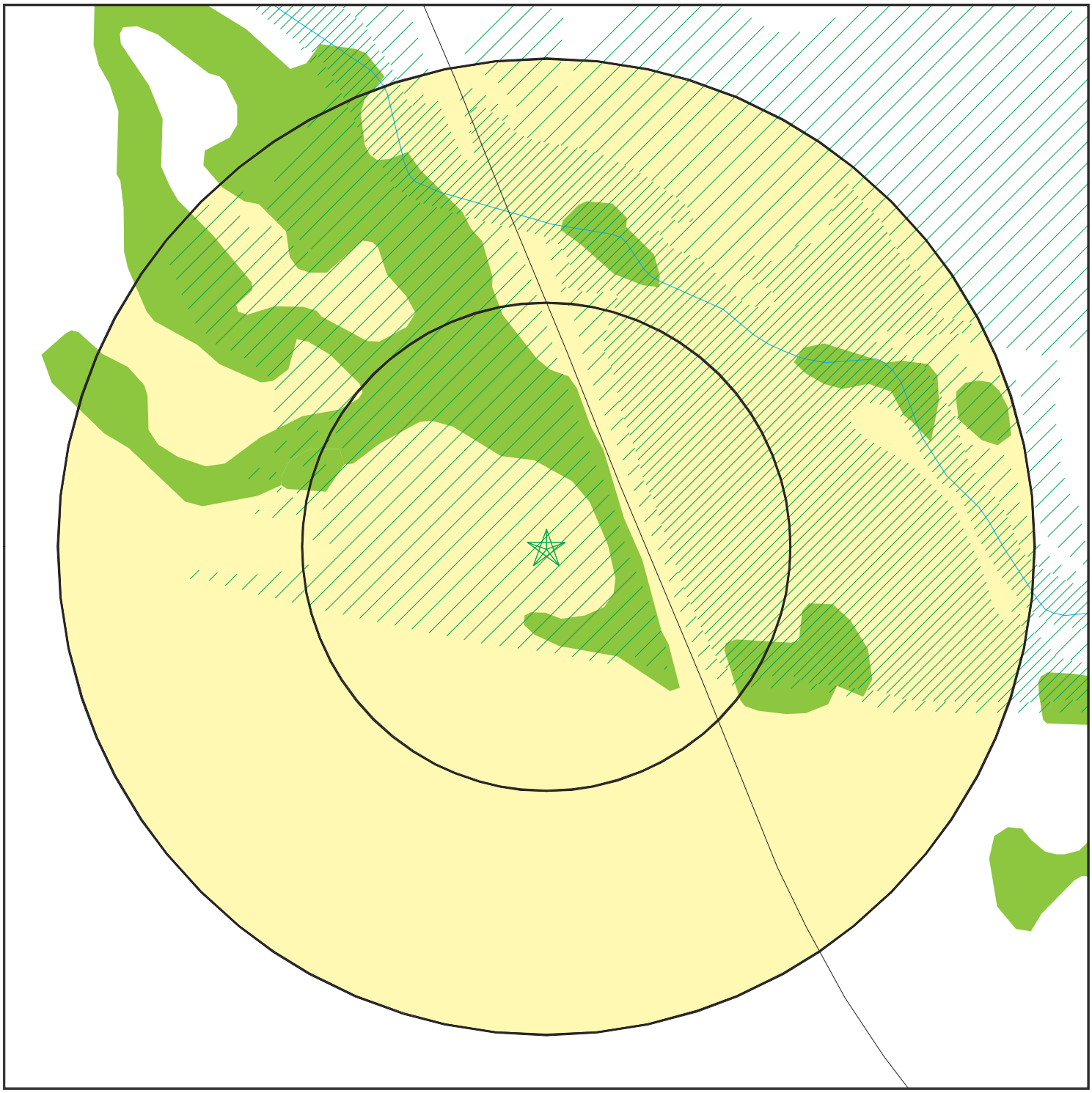
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Loves Travel Stop & Country Store ADDRESS: SR36/Skyline Road Susanville CA 96130 LAT/LONG: 40.400274 / 120.630755	CLIENT: Reno Tahoe Geo Associates, Inc CONTACT: Shane Mulvaney INQUIRY #: 6821013.2s DATE: January 14, 2022 3:56 pm

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DETAIL MAP - 6821013.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/16 1/8 1/4 Miles

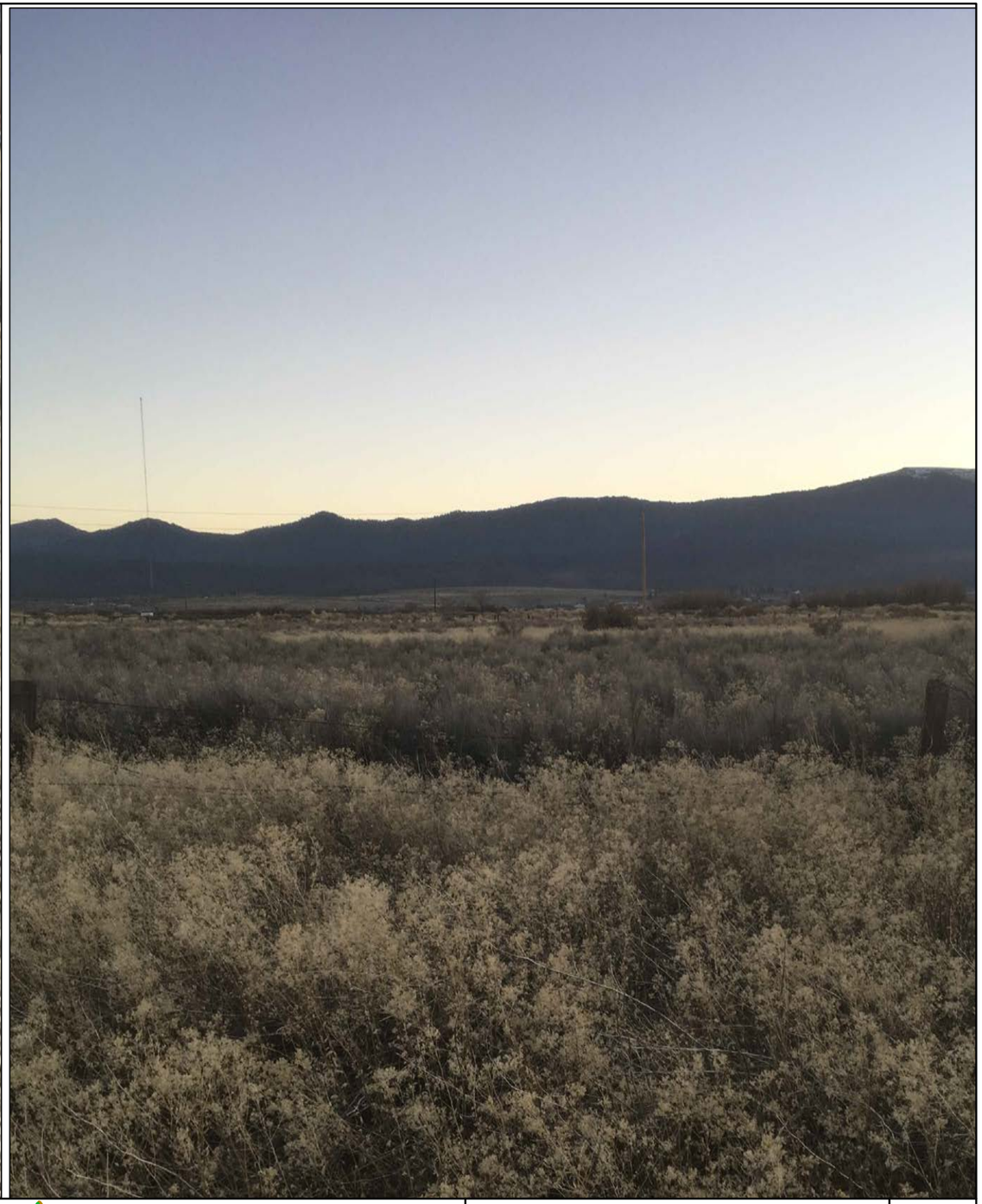
- Indian Reservations BIA
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Loves Travel Stop & Country Store ADDRESS: SR36/Skyline Road Susanville CA 96130 LAT/LONG: 40.400274 / 120.630755	CLIENT: Reno Tahoe Geo Associates, Inc CONTACT: Shane Mulvaney INQUIRY #: 6821013.2s DATE: January 14, 2022 3:59 pm

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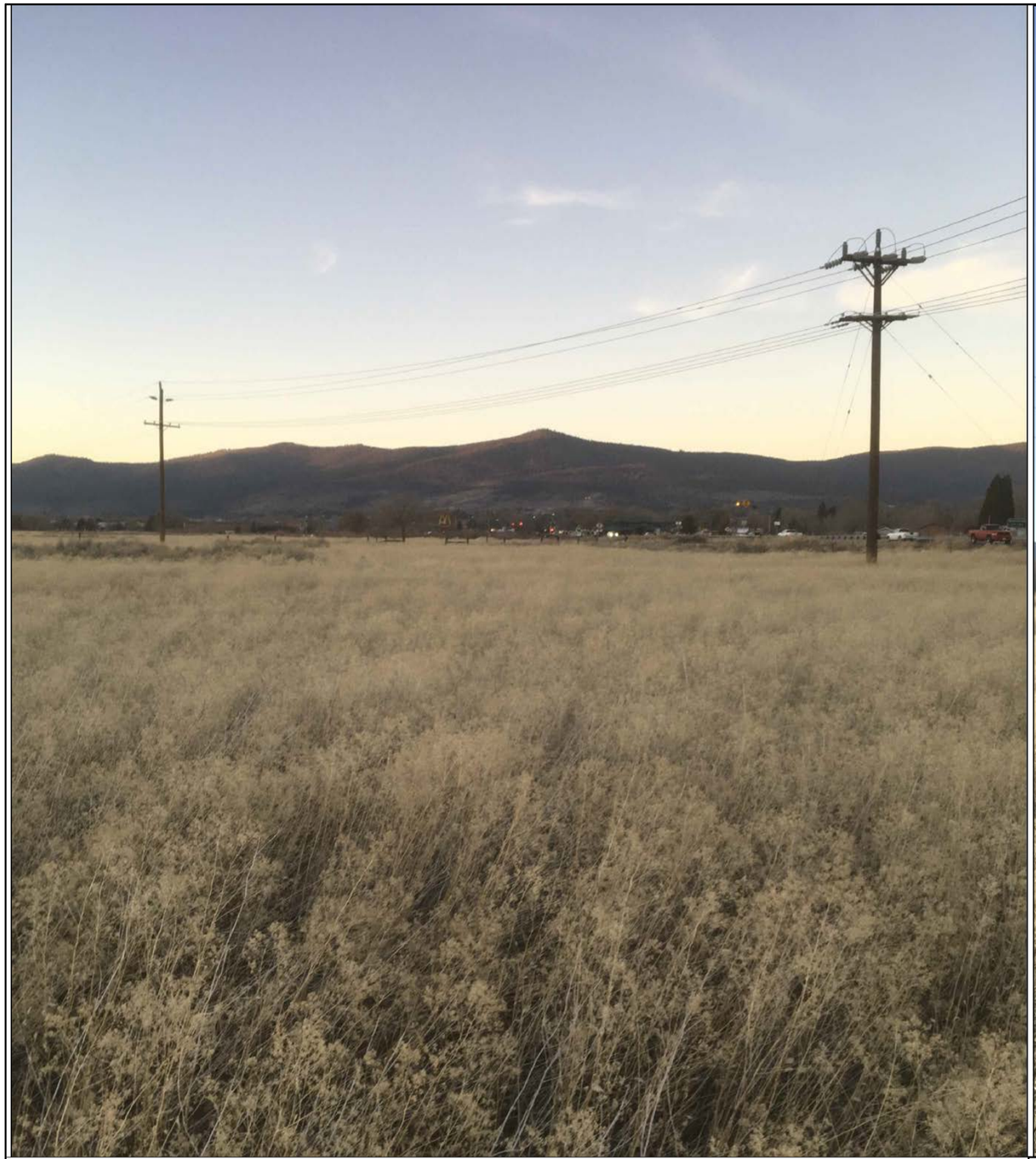
JOB # 21166.002 APPR: _____ DATE: 2/1/2022

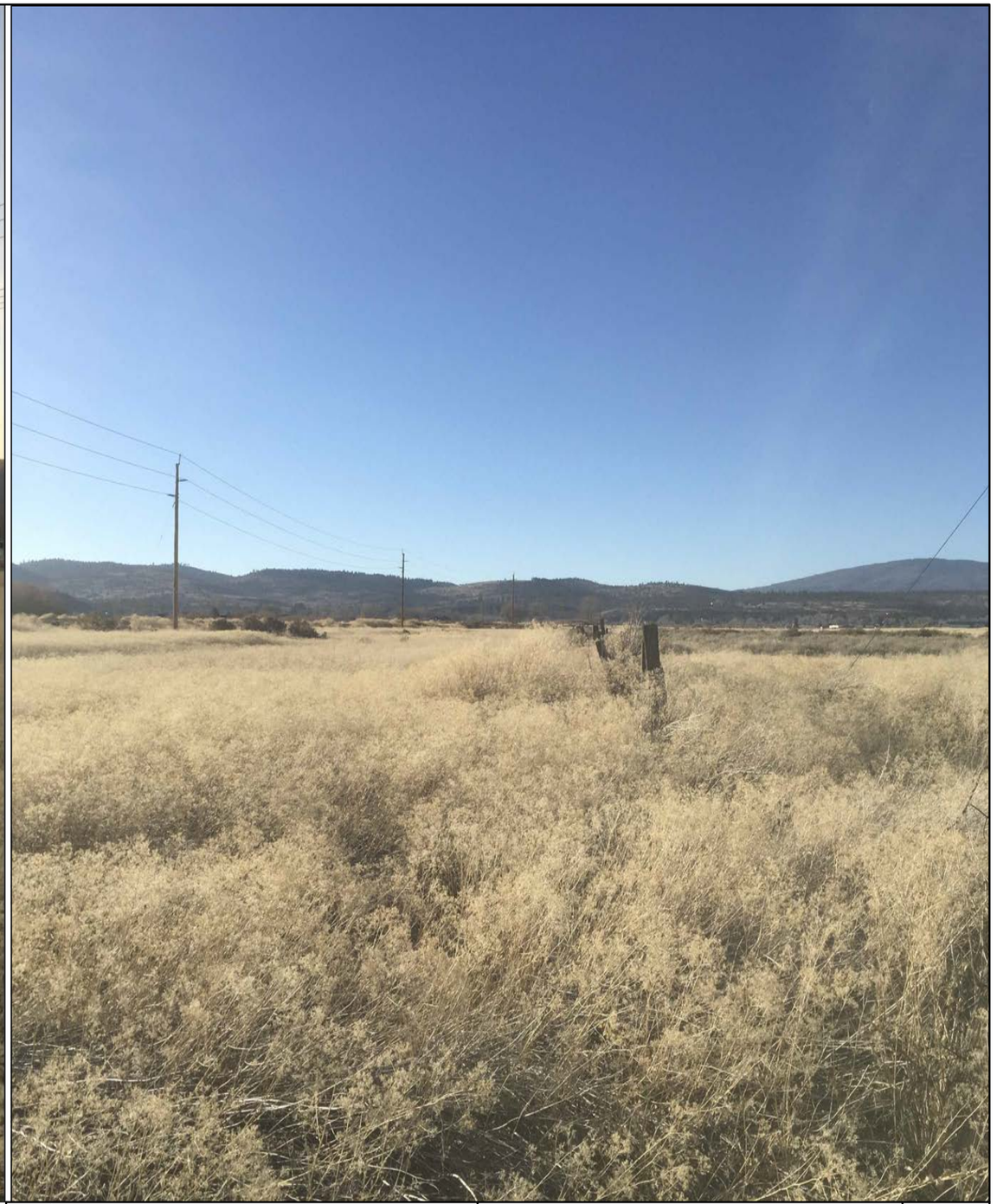
SITE PHOTOGRAPHS

PHASE I ENVIRONMENTAL ASSESSMENT
LOVES TRAVEL STOPS
SUSANVILLE

LASSEN COUNTY CALIFORNIA

PLATE 5





Reno Tahoe Geo Associates, Inc.

P.O. Box 18449
Reno, Nevada 89511

CONSULTING CIVIL ENGINEERS

TEL (775)853-9100
FAX (775)853-9199

JOB # 21166.002 APPR: _____ DATE: 2/1/2022

SITE PHOTOGRAPHS

PHASE I ENVIRONMENTAL ASSESSMENT
LOVES TRAVEL STOPS
SUSANVILLE

LASSEN COUNTY CALIFORNIA

PLATE 6

APPENDICES

APPENDIX A

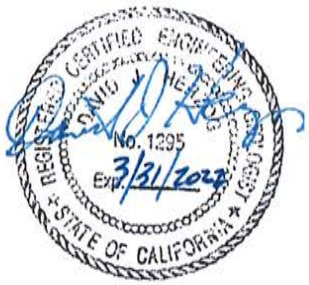
QUALIFICATIONS OF

ENVIRONMENTAL PROFESSIONALS

STATEMENT OF QUALIFICATIONS

I declare that to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312 (12.13.1). I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject site. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in CFR Part 312 (12.13.2).

David J. Herzog, C.E.G. #1295
Senior Engineering Geologist



APPENDIX B

EDR DATABASE REPORT

Loves Travel Stop & Country Store
SR36/Skyline Road
Susanville, CA 96130

Inquiry Number: 6821013.2s
January 14, 2022

EDR Summary Radius Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	9
Orphan Summary	14
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-12
Physical Setting Source Map Findings	A-14
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

SR36/SKYLINE ROAD
SUSANVILLE, CA 96130

COORDINATES

Latitude (North):	40.4002740 - 40ˆ 24' 0.98''
Longitude (West):	120.6307550 - 120ˆ 37' 50.71''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	701066.9
UTM Y (Meters):	4474669.5
Elevation:	4154 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	U.S. Geological Survey

Target Property:	NE
Source:	U.S. Geological Survey

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140725
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
SR36/SKYLINE ROAD
SUSANVILLE, CA 96130

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	LEO S. JONES OIL CO.	702805 JOHNSTONVILLE	HIST CORTESE	Lower	2273, 0.430, East
2	CHEVRON USA	JOHNSTONVILLE AND CO	ENVIROSTOR	Lower	2910, 0.551, East
3	SUSANVILLE FOREST PR	702-040 JOHNSTONVILL	ENVIROSTOR, CPS-SLIC, CERS	Lower	3058, 0.579, East
4	TEXACO PAYLESS STATI	2750 MAIN STREET	CPS-SLIC, Notify 65	Higher	4276, 0.810, NNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: A review of the ENVIROSTOR list, as provided by EDR, and dated 07/22/2021 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON USA Facility Id: 18510005 Status: Refer: Other Agency	JOHNSTONVILLE AND CO	E 1/2 - 1 (0.551 mi.)	2	9
SUSANVILLE FOREST PR Facility Id: 18240004 Status: No Further Action	***702-040 JOHNSTONVILL***	***E 1/2 - 1 (0.579 mi.)***	***3***	***9***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

HIST CORTESE: A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
LEO S. JONES OIL CO. Reg Id: 6T0046A	702805 JOHNSTONVILLE	E 1/4 - 1/2 (0.430 mi.)	1	9

EXECUTIVE SUMMARY

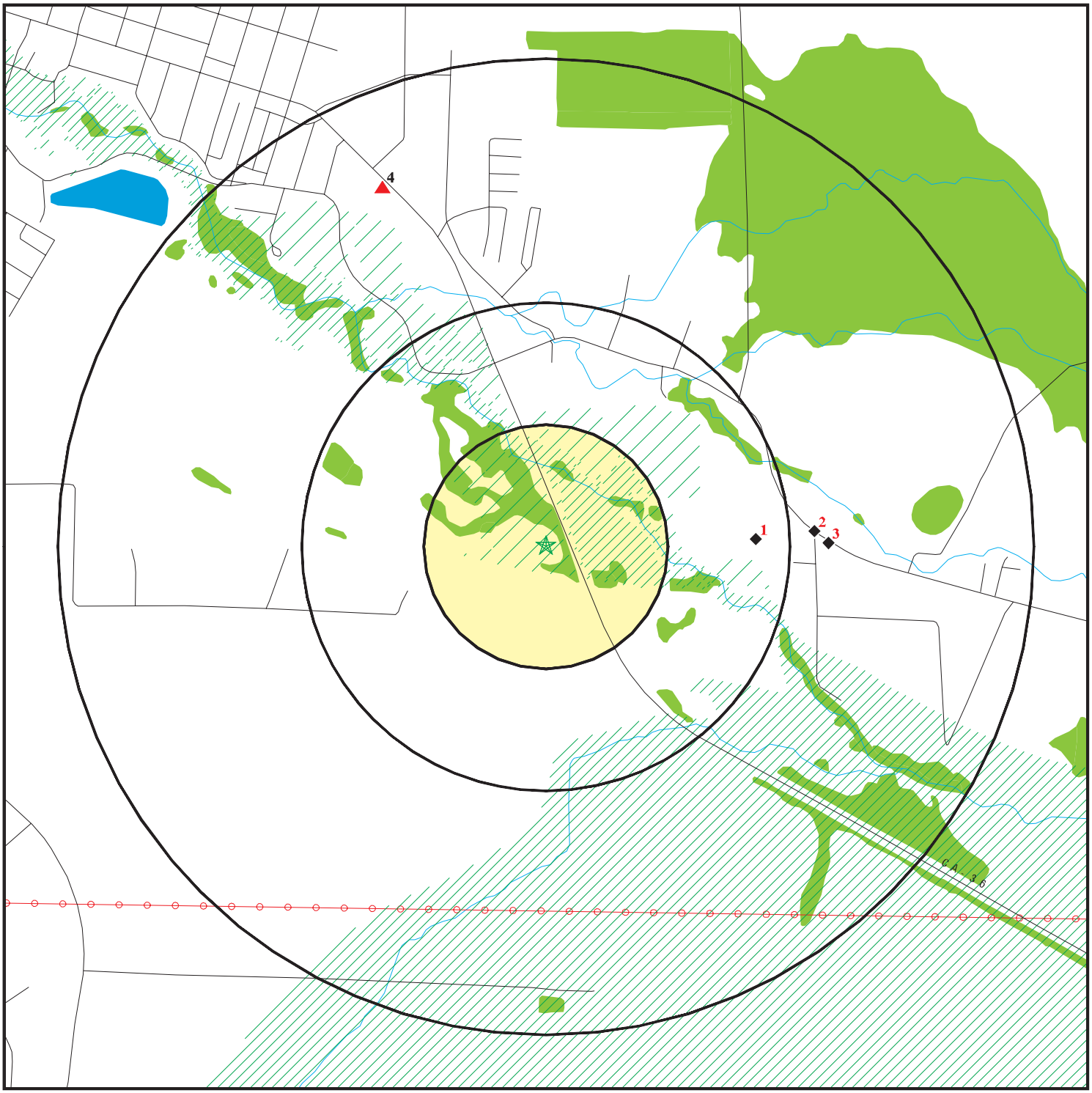
Notify 65: A review of the Notify 65 list, as provided by EDR, and dated 03/12/2021 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TEXACO PAYLESS STATI	*2750 MAIN STREET*	*NNW 1/2 - 1 (0.810 mi.)*	*4*	*9*

Count: 6 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
JOHNSTONVILLE	S101480537	LASSEN COUNTY LANDFILL	HIGHWAY 395, JOHNSTONVILLE ARE	96130	ENVIROSTOR
SUSANVILLE	S100180544	STOP LIGHT AUTO WRECKERS	BIG SKY BOULEVARD	96130	ENVIROSTOR
SUSANVILLE	S105842697	LEO S. JONES OIL COMPANY	JOHNSTONVILLE ROAD		LUST
SUSANVILLE	S106164871	STAUB ENERGY	JOHNSTONVILLE ROAD		CPS-SLIC
SUSANVILLE	S106164868	FORMER TOSCO BULK PLANT	JOHNSTONVILLE ROAD		CPS-SLIC
SUSANVILLE	S105842704	SIERRA CHEVRON	MAIN STREET		LUST

OVERVIEW MAP - 6821013.2S



0 1/4 1/2 1 Miles

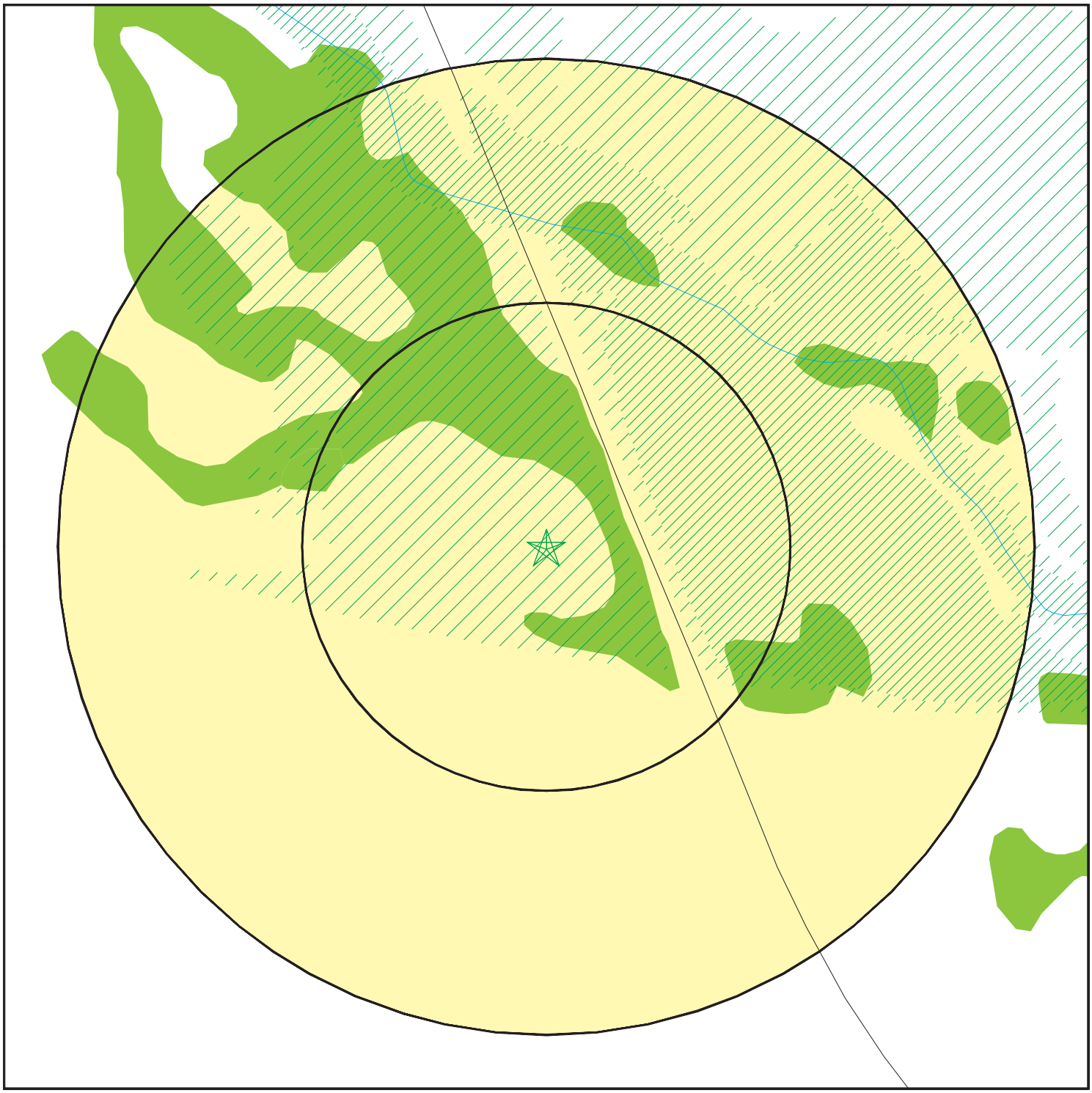
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Loves Travel Stop & Country Store	CLIENT:	Reno Tahoe Geo Associates, Inc
ADDRESS:	SR36/Skyline Road Susanville CA 96130	CONTACT:	Shane Mulvaney
LAT/LONG:	40.400274 / 120.630755	INQUIRY #:	6821013.2s
		DATE:	January 14, 2022 3:56 pm

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DETAIL MAP - 6821013.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/16 1/8 1/4 Miles

- Indian Reservations BIA
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

N

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
RESPONSE	1.000		0	0	0	0	NR	0
Lists of state- and tribal hazardous waste facilities								
ENVIROSTOR	1.000		0	0	0	2	NR	2
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
AQUEOUS FOAM	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	1	NR	NR	1
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	1	NR	1
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	0	0	1	3	0	4

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
East
1/4-1/2
0.430 mi.
2273 ft.

Relative:
Lower

LEO S. JONES OIL CO.
702805 JOHNSTONVILLE BOX 1298
SUSANVILLE, CA 96130

HIST CORTESE **S105026906**
N/A

Click here for full text details

HIST CORTESE
Reg Id 6T0046A

2
East
1/2-1
0.551 mi.
2910 ft.

Relative:
Lower

CHEVRON USA
JOHNSTONVILLE AND COMMERCIAL ROADS
SUSANVILLE, CA 96130

ENVIROSTOR **S101480542**
N/A

Click here for full text details

ENVIROSTOR
Facility Id 18510005
Status Refer: Other Agency

3
East
1/2-1
0.579 mi.
3058 ft.

Relative:
Lower

SUSANVILLE FOREST PRODUCTS
702-040 JOHNSTONVILLE ROAD
SUSANVILLE, CA 96130

ENVIROSTOR **S101480533**
CPS-SLIC **N/A**
CERS

Click here for full text details

ENVIROSTOR
Facility Id 18240004
Status No Further Action

CPS-SLIC
Facility Status Completed - Case Closed
Global Id T10000005156

Click here to access the California GeoTracker records for this facility

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4
NNW
1/2-1
0.810 mi.
4276 ft.

Relative:
Higher

TEXACO PAYLESS STATION
2750 MAIN STREET
SUSANVILLE, CA

CPS-SLIC **S102610488**
Notify 65 **N/A**

Click here for full text details

CPS-SLIC
Case Number T6S033
Date Open or Closed 9/23/03
Active or Closed C

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	AQUEOUS FOAM	Former Fire Training Facility Assessments Listing	State Water Resources Control Board	12/01/2019	08/19/2021	10/28/2021
CA	AST	Aboveground Petroleum Storage Tank Facilities	California Environmental Protection Agency	07/06/2016	07/12/2016	09/19/2016
CA	BROWNFIELDS	Considered Brownfieds Sites Listing	State Water Resources Control Board	09/20/2021	09/21/2021	12/08/2021
CA	CA BOND EXP. PLAN	Bond Expenditure Plan	Department of Health Services	01/01/1989	07/27/1994	08/02/1994
CA	CA FID UST	Facility Inventory Database	California Environmental Protection Agency	10/31/1994	09/05/1995	09/29/1995
CA	CDL	Clandestine Drug Labs	Department of Toxic Substances Control	12/31/2019	01/20/2021	04/08/2021
CA	CERS	CalEPA Regulated Site Portal Data	California Environmental Protection Agency	10/18/2021	10/19/2021	01/12/2022
CA	CERS HAZ WASTE	CERS HAZ WASTE	CalEPA	10/18/2021	10/19/2021	01/12/2022
CA	CERS TANKS	California Environmental Reporting System (CERS) Tanks	California Environmental Protection Agency	10/18/2021	10/19/2021	01/12/2022
CA	CHMIRS	California Hazardous Material Incident Report System	Office of Emergency Services	09/30/2021	10/19/2021	01/12/2022
CA	CIWQS	California Integrated Water Quality System	State Water Resources Control Board	08/30/2021	08/31/2021	11/19/2021
CA	CORTESE	"Cortese" Hazardous Waste & Substances Sites List	CAL EPA/Office of Emergency Information	09/20/2021	09/21/2021	12/08/2021
CA	CPS-SLIC	Statewide SLIC Cases (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	CUPA LIVERMORE-PLEASANTON	CUPA Facility Listing	Livermore-Pleasanton Fire Department	05/01/2019	05/14/2019	07/17/2019
CA	DEED	Deed Restriction Listing	DTSC and SWRCB	08/30/2021	08/31/2021	11/19/2021
CA	DRYCLEAN AVAQMD	Antelope Valley Air Quality Management District Drycleaner L	Antelope Valley Air Quality Management Distri	08/24/2021	08/25/2021	11/17/2021
CA	DRYCLEAN SOUTH COAST	South Coast Air Quality Management District Drycleaner Listi	South Coast Air Quality Management District	08/18/2021	08/23/2021	11/12/2021
CA	DRYCLEANERS	Cleaner Facilities	Department of Toxic Substance Control	08/27/2021	09/01/2021	11/19/2021
CA	EMI	Emissions Inventory Data	California Air Resources Board	12/31/2019	06/10/2021	08/27/2021
CA	ENF	Enforcement Action Listing	State Water Resoruces Control Board	04/16/2021	04/20/2021	07/07/2021
CA	ENVIROSTOR	EnviroStor Database	Department of Toxic Substances Control	07/22/2021	07/22/2021	10/08/2021
CA	Financial Assurance 1	Financial Assurance Information Listing	Department of Toxic Substances Control	10/05/2021	10/06/2021	12/29/2021
CA	Financial Assurance 2	Financial Assurance Information Listing	California Integrated Waste Management Board	08/13/2021	08/13/2021	11/05/2021
CA	HAULERS	Registered Waste Tire Haulers Listing	Integrated Waste Management Board	09/14/2021	11/11/2021	11/23/2021
CA	HAZNET	Facility and Manifest Data	California Environmental Protection Agency	12/31/2019	04/15/2020	07/02/2020
CA	HIST CAL-SITES	Calsites Database	Department of Toxic Substance Control	08/08/2005	08/03/2006	08/24/2006
CA	HIST CORTESE	Hazardous Waste & Substance Site List	Department of Toxic Substances Control	04/01/2001	01/22/2009	04/08/2009
CA	HIST UST	Hazardous Substance Storage Container Database	State Water Resources Control Board	10/15/1990	01/25/1991	02/12/1991
CA	HWP	EnviroStor Permitted Facilities Listing	Department of Toxic Substances Control	08/13/2021	08/13/2021	11/08/2021
CA	HWT	Registered Hazardous Waste Transporter Database	Department of Toxic Substances Control	10/04/2021	10/05/2021	12/22/2021
CA	HWTS	Hazardous Waste Tracking System	Department of Toxic Substances Control	07/13/2021	07/14/2021	10/06/2021
CA	ICE	ICE	Department of Toxic Subsances Control	08/13/2021	08/13/2021	11/08/2021
CA	LDS	Land Disposal Sites Listing (GEOTRACKER)	State Water Qualilty Control Board	09/07/2021	09/07/2021	11/29/2021
CA	LIENS	Environmental Liens Listing	Department of Toxic Substances Control	08/25/2021	09/03/2021	11/22/2021
CA	LUST	Leaking Underground Fuel Tank Report (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	LUST REG 1	Active Toxic Site Investigation	California Regional Water Quality Control Boa	02/01/2001	02/28/2001	03/29/2001
CA	LUST REG 2	Fuel Leak List	California Regional Water Quality Control Boa	09/30/2004	10/20/2004	11/19/2004
CA	LUST REG 3	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	05/19/2003	05/19/2003	06/02/2003
CA	LUST REG 4	Underground Storage Tank Leak List	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	LUST REG 5	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	07/01/2008	07/22/2008	07/31/2008
CA	LUST REG 6L	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	09/09/2003	09/10/2003	10/07/2003
CA	LUST REG 6V	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	06/07/2005	06/07/2005	06/29/2005
CA	LUST REG 7	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	02/26/2004	02/26/2004	03/24/2004
CA	LUST REG 8	Leaking Underground Storage Tanks	California Regional Water Quality Control Boa	02/14/2005	02/15/2005	03/28/2005
CA	LUST REG 9	Leaking Underground Storage Tank Report	California Regional Water Quality Control Boa	03/01/2001	04/23/2001	05/21/2001
CA	MCS	Military Cleanup Sites Listing (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	MILITARY PRIV SITES	Military Privatized Sites (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	MILITARY UST SITES	Military UST Sites (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	MINES	Mines Site Location Listing	Department of Conservation	09/07/2021	09/07/2021	11/29/2021
CA	MWMP	Medical Waste Management Program Listing	Department of Public Health	08/05/2021	08/31/2021	11/19/2021
CA	NON-CASE INFO	Non-Case Information Sites (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	NOTIFY 65	Proposition 65 Records	State Water Resources Control Board	03/12/2021	03/16/2021	06/01/2021
CA	NPDES	NPDES Permits Listing	State Water Resources Control Board	05/10/2021	05/11/2021	07/27/2021
CA	OTHER OIL GAS	Other Oil & Gas Projects Sites (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	PEST LIC	Pesticide Regulation Licenses Listing	Department of Pesticide Regulation	08/30/2021	08/31/2021	11/19/2021
CA	PFAS	PFAS Contamination Site Location Listing	State Water Resources Control Board	09/07/2021	09/08/2021	12/01/2021
CA	PROC	Certified Processors Database	Department of Conservation	06/04/2021	06/04/2021	08/27/2021
CA	PROD WATER PONDS	Produced Water Ponds Sites (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	PROJECT	Project Sites (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	RESPONSE	State Response Sites	Department of Toxic Substances Control	07/22/2021	07/22/2021	10/08/2021
CA	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Resources Recycling and Recover		07/01/2013	01/13/2014
CA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	State Water Resources Control Board		07/01/2013	12/30/2013
CA	SAMPLING POINT	Sampling Point ? Public Sites (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	SAN FRANCISCO AST	Aboveground Storage Tank Site Listing	San Francisco County Department of Public Hea	08/05/2021	08/05/2021	10/29/2021
CA	SCH	School Property Evaluation Program	Department of Toxic Substances Control	07/22/2021	07/22/2021	10/08/2021
CA	SLIC REG 1	Active Toxic Site Investigations	California Regional Water Quality Control Boa	04/03/2003	04/07/2003	04/25/2003
CA	SLIC REG 2	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board San Fran	09/30/2004	10/20/2004	11/19/2004
CA	SLIC REG 3	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	05/18/2006	05/18/2006	06/15/2006
CA	SLIC REG 4	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Region Water Quality Control Board Los Angele	11/17/2004	11/18/2004	01/04/2005
CA	SLIC REG 5	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board Central	04/01/2005	04/05/2005	04/21/2005
CA	SLIC REG 6L	SLIC Sites	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	SLIC REG 6V	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board, Victorv	05/24/2005	05/25/2005	06/16/2005
CA	SLIC REG 7	SLIC List	California Regional Quality Control Board, Co	11/24/2004	11/29/2004	01/04/2005
CA	SLIC REG 8	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Region Water Quality Control Board	04/03/2008	04/03/2008	04/14/2008
CA	SLIC REG 9	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	09/10/2007	09/11/2007	09/28/2007
CA	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	06/06/2012	01/03/2013	02/22/2013
CA	SWEEPS UST	SWEEPS UST Listing	State Water Resources Control Board	06/01/1994	07/07/2005	08/11/2005
CA	SWF/LF (SWIS)	Solid Waste Information System	Department of Resources Recycling and Recover	08/09/2021	08/10/2021	11/05/2021
CA	SWRCY	Recycler Database	Department of Conservation	09/07/2021	09/08/2021	11/29/2021
CA	TOXIC PITS	Toxic Pits Cleanup Act Sites	State Water Resources Control Board	07/01/1995	08/30/1995	09/26/1995
CA	UIC	UIC Listing	Deaprtment of Conservation	06/03/2021	06/03/2021	08/25/2021
CA	UIC GEO	Underground Injection Control Sites (GEOTRACKER)	State Water Resource Control Board	09/07/2021	09/07/2021	11/29/2021
CA	UST	Active UST Facilities	SWRCB	09/07/2021	09/07/2021	11/30/2021
CA	UST CLOSURE	Proposed Closure of Underground Storage Tank (UST) Cases	State Water Resources Control Board	08/18/2021	09/08/2021	12/03/2021
CA	VCP	Voluntary Cleanup Program Properties	Department of Toxic Substances Control	07/22/2021	07/22/2021	10/08/2021
CA	WASTEWATER PITS	Oil Wastewater Pits Listing	RWQCB, Central Valley Region	02/11/2021	07/01/2021	09/29/2021
CA	WDR	Waste Discharge Requirements Listing	State Water Resources Control Board	09/07/2021	09/08/2021	12/01/2021
CA	WDS	Waste Discharge System	State Water Resources Control Board	06/19/2007	06/20/2007	06/29/2007
CA	WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)	State Water Resources Control Board	09/07/2021	09/07/2021	11/29/2021
CA	WIP	Well Investigation Program Case List	Los Angeles Water Quality Control Board	07/03/2009	07/21/2009	08/03/2009
CA	WMUDS/SWAT	Waste Management Unit Database	State Water Resources Control Board	04/01/2000	04/10/2000	05/10/2000
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	ABANDONED MINES	Abandoned Mines	Department of Interior	09/14/2021	09/15/2021	12/15/2021
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2019	09/15/2021	12/14/2021

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2019	12/01/2020	02/09/2021
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	01/12/2017	03/05/2019	11/11/2019
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	09/30/2021	10/13/2021	01/10/2022
US	CORRACTS	Corrective Action Report	EPA	09/13/2021	09/15/2021	10/12/2021
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	05/06/2021	05/21/2021	08/11/2021
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	01/02/2020	01/28/2020	04/17/2020
US	Delisted NPL	National Priority List Deletions	EPA	10/20/2021	11/05/2021	11/29/2021
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	01/01/2022	01/04/2022	01/10/2022
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/13/2021	09/21/2021	12/15/2021
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	05/25/2021	06/24/2021	09/20/2021
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	04/02/2018	04/11/2018	11/06/2019
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/29/2021	02/17/2021	03/22/2021
US	FINDS	Facility Index System/Facility Registry System	EPA	05/05/2021	05/18/2021	08/17/2021
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	08/10/2021	08/17/2021	10/22/2021
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	08/13/2021	08/13/2021	10/22/2021
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	07/26/2021	07/27/2021	10/22/2021
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	09/12/2021	09/13/2021	09/28/2021
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	04/01/2014	08/06/2014	01/29/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	04/28/2021	06/11/2021	09/07/2021
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	04/27/2021	06/11/2021	09/07/2021
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	05/28/2021	06/22/2021	09/20/2021
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	04/06/2021	06/11/2021	09/07/2021
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	05/17/2021	06/11/2021	09/07/2021
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	06/01/2021	06/11/2021	09/07/2021
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	05/27/2021	06/11/2021	09/07/2021
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	05/27/2021	06/11/2021	09/07/2021
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	04/28/2021	06/11/2021	09/07/2021
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	04/27/2021	06/11/2021	09/07/2021
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	05/28/2021	06/22/2021	09/20/2021
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	04/06/2021	06/11/2021	09/07/2021
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	05/17/2021	06/11/2021	09/07/2021
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	06/01/2021	06/11/2021	09/07/2021
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	05/27/2021	06/11/2021	09/07/2021
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	05/27/2021	06/11/2021	09/07/2021

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	10/20/2021	11/05/2021	11/29/2021
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	10/20/2021	11/05/2021	11/29/2021
US	LUCIS	Land Use Control Information System	Department of the Navy	07/12/2021	08/06/2021	10/22/2021
US	MINES MRDS	Mineral Resources Data System	USGS	04/06/2018	10/21/2019	10/24/2019
US	MINES VIOLATIONS	MSHA Violation Assessment Data	DOL, Mine Safety & Health Admi	06/30/2021	07/01/2021	09/28/2021
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	07/29/2021	08/24/2021	11/19/2021
US	NPL	National Priority List	EPA	10/20/2021	11/05/2021	11/29/2021
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	11/19/2020	01/08/2021	03/22/2021
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	09/13/2019	11/06/2019	02/10/2020
US	PCS	Permit Compliance System	EPA, Office of Water	07/14/2011	08/05/2011	09/29/2011
US	PCS ENF	Enforcement data	EPA	12/31/2014	02/05/2015	03/06/2015
US	PCS INACTIVE	Listing of Inactive PCS Permits	EPA	11/05/2014	01/06/2015	05/06/2015
US	PRP	Potentially Responsible Parties	EPA	10/20/2021	11/05/2021	12/15/2021
US	Proposed NPL	Proposed National Priority List Sites	EPA	10/20/2021	11/05/2021	11/29/2021
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	07/01/2019	07/01/2019	09/23/2019
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	09/13/2021	09/15/2021	10/12/2021
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	09/13/2021	09/15/2021	10/12/2021
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	09/13/2021	09/15/2021	10/12/2021
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	09/13/2021	09/15/2021	10/12/2021
US	RCRA-VSQG	RCRA - Very Small Quantity Generators (Formerly Conditionall	Environmental Protection Agency	09/13/2021	09/15/2021	10/12/2021
US	RMP	Risk Management Plans	Environmental Protection Agency	10/20/2021	11/05/2021	11/12/2021
US	ROD	Records Of Decision	EPA	10/20/2021	11/05/2021	11/29/2021
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	01/01/2017	02/03/2017	04/07/2017
US	SEMS	Superfund Enterprise Management System	EPA	10/20/2021	11/05/2021	11/29/2021
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	10/20/2021	11/05/2021	11/29/2021
US	SSTS	Section 7 Tracking Systems	EPA	10/18/2021	10/20/2021	01/10/2022
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2018	08/14/2020	11/04/2020
US	TSCA	Toxic Substances Control Act	EPA	12/31/2016	06/17/2020	09/10/2020
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	08/30/2019	11/15/2019	01/28/2020
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	06/10/2021	06/10/2021	08/17/2021
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	05/18/2021	05/18/2021	08/03/2021
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	08/23/2021	08/23/2021	11/12/2021
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	09/13/2021	09/15/2021	09/28/2021
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	05/18/2021	05/18/2021	08/03/2021
US	US INST CONTROLS	Institutional Controls Sites List	Environmental Protection Agency	08/23/2021	08/23/2021	11/12/2021
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	08/09/2021	08/24/2021	11/19/2021
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	05/06/2020	05/27/2020	08/13/2020
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	UXO	Unexploded Ordnance Sites	Department of Defense	12/31/2018	07/02/2020	09/17/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CT	CT MANIFEST	Hazardous Waste Manifest Data	Department of Energy & Environmental Protecti	07/23/2021	08/10/2021	11/08/2021
NJ	NJ MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2018	04/10/2019	05/16/2019
NY	NY MANIFEST	Facility and Manifest Data	Department of Environmental Conservation	01/01/2019	04/29/2020	07/10/2020
PA	PA MANIFEST	Manifest Information	Department of Environmental Protection	06/30/2018	07/19/2019	09/10/2019
RI	RI MANIFEST	Manifest information	Department of Environmental Management	12/31/2019	02/11/2021	02/24/2021
WI	WI MANIFEST	Manifest Information	Department of Natural Resources	05/31/2018	06/19/2019	09/03/2019
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
CA	Daycare Centers	Sensitive Receptor: Licensed Facilities	Department of Social Services			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
CA	State Wetlands	Wetland Inventory	Department of Fish and Wildlife			
US	Topographic Map		U.S. Geological Survey			
US	Oil/Gas Pipelines		Endeavor Business Media			
US	Electric Power Transmission Line Data		Endeavor Business Media			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

LOVES TRAVEL STOP & COUNTRY STORE
SR36/SKYLINE ROAD
SUSANVILLE, CA 96130

TARGET PROPERTY COORDINATES

Latitude (North):	40.400274 - 40ˆ 24’ 0.99’’
Longitude (West):	120.630755 - 120ˆ 37’ 50.72’’
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	701066.9
UTM Y (Meters):	4474669.5
Elevation:	4154 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	12012537 SUSANVILLE, CA
Version Date:	2018
Northeast Map:	12012485 JOHNSTONVILLE, CA
Version Date:	2018

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

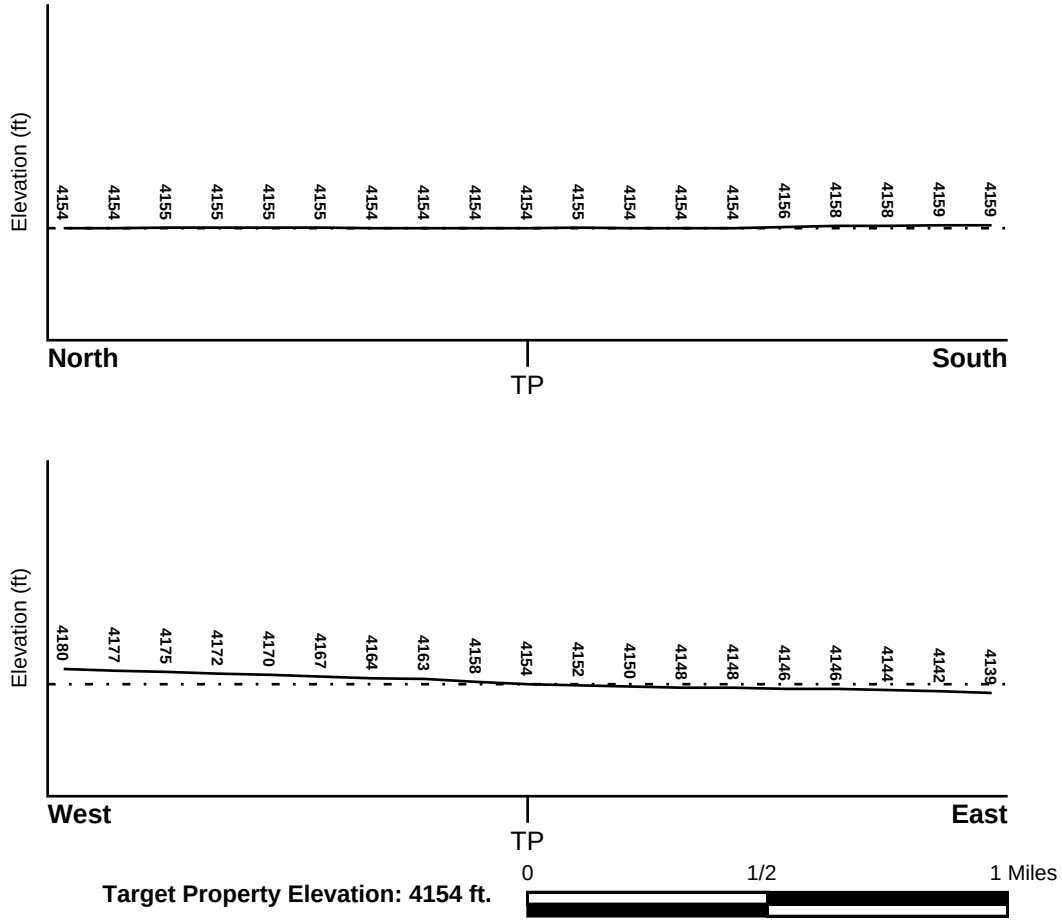
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General East

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06035C1944D	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06035C1975D	FEMA FIRM Flood data
06035C1942D	FEMA FIRM Flood data
06035C1963D	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
SUSANVILLE NW	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

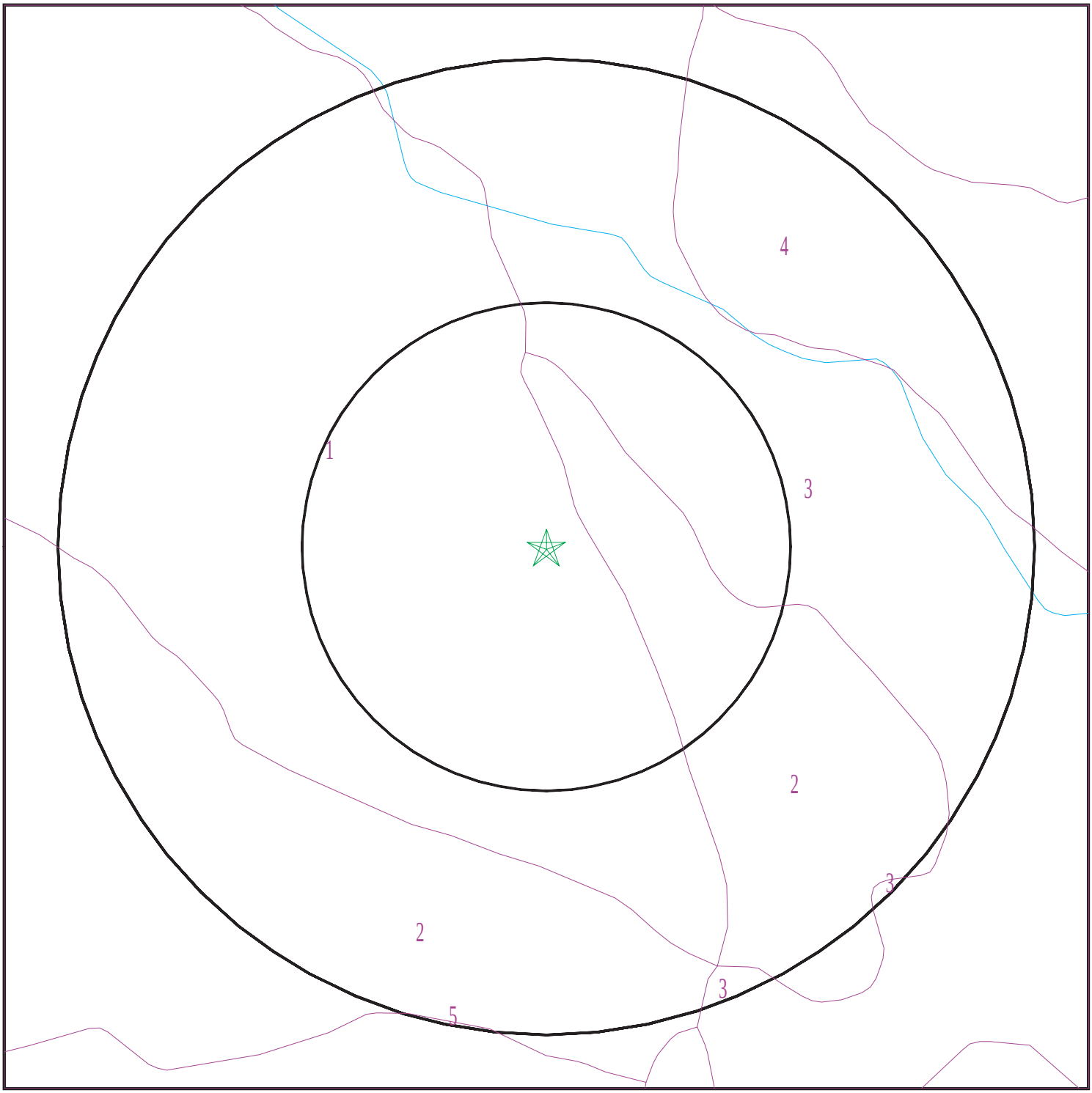
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary volcanic rocks
Code:	Qv *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Volcanic Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 6821013.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Loves Travel Stop & Country Store	CLIENT:	Reno Tahoe Geo Associates, Inc
ADDRESS:	SR36/Skyline Road	CONTACT:	Shane Mulvaney
	Susanville CA 96130	INQUIRY #:	6821013.2s
LAT/LONG:	40.400274 / 120.630755	DATE:	January 14, 2022 4:01 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Blickenstaff

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 130 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42.34 Min: 14.11	Max: 9.6 Min: 8.5
2	14 inches	33 inches	gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42.34 Min: 14.11	Max: 9.6 Min: 8.5
3	33 inches	59 inches	gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42.34 Min: 14.11	Max: 9.6 Min: 8.5

Soil Map ID: 2

Soil Component Name: Truckee

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 114 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.9
2	16 inches	68 inches	stratified sandy loam to silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.9

Soil Map ID: 3

Soil Component Name: Susanville

Soil Surface Texture: very fine sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 122 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.9
2	3 inches	16 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.9
3	16 inches	38 inches	stratified clay loam to clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.9
4	38 inches	61 inches	stratified silt loam to clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.9

Soil Map ID: 4

Soil Component Name: Lakeview

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 114 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4
2	18 inches	59 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4

Soil Map ID: 5

Soil Component Name: Modoc

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14.11 Min: 4.23	Max: 7.8 Min: 7.4
2	16 inches	27 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14.11 Min: 4.23	Max: 7.8 Min: 7.4
3	27 inches	50 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14.11 Min: 4.23	Max: 7.8 Min: 7.4
4	50 inches	59 inches	stratified gravelly coarse sandy loam to very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14.11 Min: 4.23	Max: 7.8 Min: 7.4

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
H52	USGS40000194340	1/2 - 1 Mile ESE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

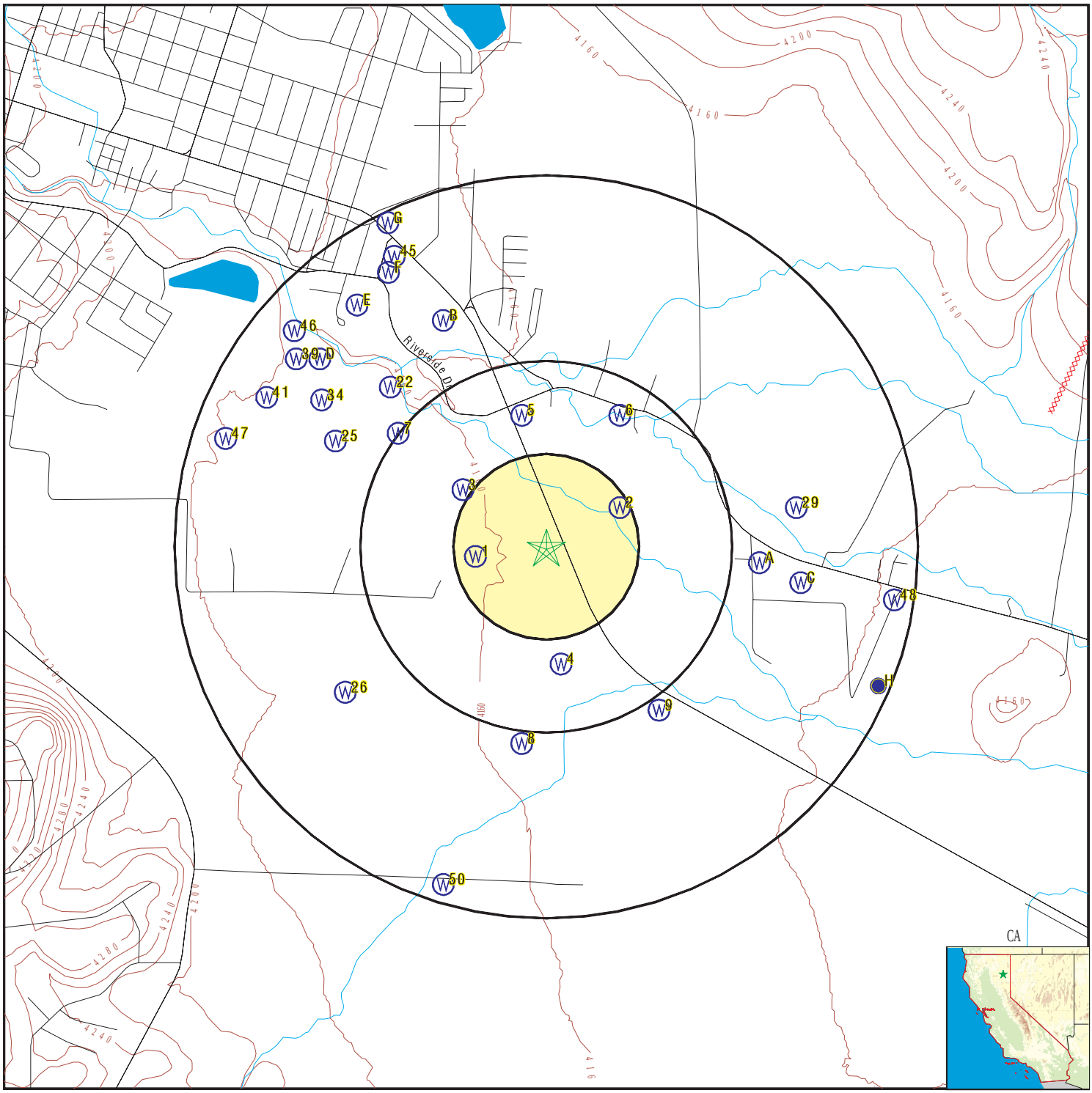
MAP ID	WELL ID	LOCATION FROM TP
1	17074	1/8 - 1/4 Mile West
2	CADWR0000029223	1/8 - 1/4 Mile ENE
3	CAEDF0000010492	1/4 - 1/2 Mile NW
4	CADWR9000043275	1/4 - 1/2 Mile South
5	CADWR0000000796	1/4 - 1/2 Mile North
6	CADWR0000032163	1/4 - 1/2 Mile NNE
7	CAEDF0000068178	1/2 - 1 Mile NW
8	CADWR9000043266	1/2 - 1 Mile South
9	CADWR9000043273	1/2 - 1 Mile SE
A10	CAEDF0000100289	1/2 - 1 Mile East
A11	CAEDF0000020462	1/2 - 1 Mile East
A12	CAEDF0000048207	1/2 - 1 Mile East
A13	CAEDF0000079675	1/2 - 1 Mile East
A14	CAEDF0000017200	1/2 - 1 Mile East
A15	CAEDF0000090763	1/2 - 1 Mile East
A16	CAEDF0000038475	1/2 - 1 Mile East
A17	CAEDF0000131466	1/2 - 1 Mile East
A18	CAEDF0000064145	1/2 - 1 Mile East
A19	CAEDF0000117470	1/2 - 1 Mile East
A20	CAEDF0000004687	1/2 - 1 Mile East
A21	CAEDF0000051457	1/2 - 1 Mile East
22	CAEDF0000088744	1/2 - 1 Mile NW
A23	CAEDF0000138473	1/2 - 1 Mile East
A24	CAEDF0000038589	1/2 - 1 Mile East
25	CAEDF0000001216	1/2 - 1 Mile WNW
26	CADWR0000009905	1/2 - 1 Mile SW
B27	CADWR0000034281	1/2 - 1 Mile NNW
B28	CADWR0000031549	1/2 - 1 Mile NNW
29	CADWR0000022291	1/2 - 1 Mile East
C30	CADWR0000003012	1/2 - 1 Mile ESE
C31	CADDW0000021804	1/2 - 1 Mile East
C32	CAUSGSN00006288	1/2 - 1 Mile East
C33	CAUSGS000001620	1/2 - 1 Mile East
34	CAEDF0000115812	1/2 - 1 Mile WNW
D35	CAEDF0000042124	1/2 - 1 Mile NW
D36	CAEDF0000055921	1/2 - 1 Mile NW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
E37	CADDW0000010781	1/2 - 1 Mile NW
E38	CAPFAS000000945	1/2 - 1 Mile NW
39	CAEDF0000095745	1/2 - 1 Mile NW
F40	CAEDF0000001496	1/2 - 1 Mile NNW
41	CAEDF0000044023	1/2 - 1 Mile WNW
F42	CAEDF0000075044	1/2 - 1 Mile NNW
F43	CAEDF0000074101	1/2 - 1 Mile NNW
F44	CAEDF0000072804	1/2 - 1 Mile NNW
45	CAEDF0000116986	1/2 - 1 Mile NNW
46	CAEDF0000143964	1/2 - 1 Mile NW
47	CAEDF0000031916	1/2 - 1 Mile WNW
48	CADWR0000014286	1/2 - 1 Mile East
G49	CAEDF0000112206	1/2 - 1 Mile NNW
50	CADWR0000007866	1/2 - 1 Mile SSW
G51	CAEDF0000011404	1/2 - 1 Mile NNW
G53	CAEDF0000137370	1/2 - 1 Mile NNW
H54	CAUSGSN00015524	1/2 - 1 Mile ESE
G55	CAEDF0000103332	1/2 - 1 Mile NNW
G56	CAEDF0000079678	1/2 - 1 Mile NNW
G57	CAEDF0000002996	1/2 - 1 Mile NNW
G58	CAEDF0000072536	1/2 - 1 Mile NNW
G59	CAEDF0000039207	1/2 - 1 Mile NNW

PHYSICAL SETTING SOURCE MAP - 6821013.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Loves Travel Stop & Country Store	CLIENT:	Reno Tahoe Geo Associates, Inc
ADDRESS:	SR36/Skyline Road Susanville CA 96130	CONTACT:	Shane Mulvaney
		INQUIRY #:	6821013.2s
LAT/LONG:	40.400274 / 120.630755	DATE:	January 14, 2022 4:01 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
1 **West** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**CA WELLS**	**17074**
2 **ENE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CADWR0000029223**
3 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000010492**
4 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CADWR9000043275**
5 **North** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADWR0000000796**
6 **NNE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CADWR0000032163**
7 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000068178**
8 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADWR9000043266**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
9 **SE** **1/2 - 1 Mile** **Lower**	**Click here for full text details**	**CA WELLS**	**CADWR9000043273**
A10 **East** **1/2 - 1 Mile** **Lower**	**Click here for full text details**	**CA WELLS**	**CAEDF0000100289**
A11 **East** **1/2 - 1 Mile** **Lower**	**Click here for full text details**	**CA WELLS**	**CAEDF0000020462**
A12 **East** **1/2 - 1 Mile** **Lower**	**Click here for full text details**	**CA WELLS**	**CAEDF0000048207**
A13 **East** **1/2 - 1 Mile** **Lower**	**Click here for full text details**	**CA WELLS**	**CAEDF0000079675**
A14 **East** **1/2 - 1 Mile** **Lower**	**Click here for full text details**	**CA WELLS**	**CAEDF0000017200**
A15 **East** **1/2 - 1 Mile** **Lower**	**Click here for full text details**	**CA WELLS**	**CAEDF0000090763**
A16 **East** **1/2 - 1 Mile** **Lower**	**Click here for full text details**	**CA WELLS**	**CAEDF0000038475**
A17 **East** **1/2 - 1 Mile** **Lower**	**Click here for full text details**	**CA WELLS**	**CAEDF0000131466**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A18 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CAEDF0000064145**
A19 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CAEDF0000117470**
A20 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CAEDF0000004687**
A21 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CAEDF0000051457**
22 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000088744**
A23 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CAEDF0000138473**
A24 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CAEDF0000038589**
25 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000001216**
26 **SW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADWR0000009905**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
B27 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADWR0000034281**
B28 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADWR0000031549**
29 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CADWR0000022291**
C30 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CADWR0000003012**
C31 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CADDW0000021804**
C32 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CAUSGSN00006288**
C33 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CAUSGS000001620**
34 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000115812**
D35 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000042124**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D36 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000055921**
E37 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADDW0000010781**
E38 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAPFAS000000945**
39 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000095745**
F40 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000001496**
41 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000044023**
F42 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000075044**
F43 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000074101**
F44 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000072804**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
45 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000116986**
46 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000143964**
47 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000031916**
48 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CADWR0000014286**
G49 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000112206**
50 **SSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADWR0000007866**
G51 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000011404**
H52 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000194340**
G53 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000137370**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
H54 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CAUSGSN00015524**
G55 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000103332**
G56 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000079678**
G57 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000002996**
G58 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000072536**
G59 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAEDF0000039207**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
96130	34	2

Federal EPA Radon Zone for LASSEN County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96130

Number of sites tested: 6

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.633 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	1.600 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX C

HISTORICAL RESEARCH DOCUMENTATION

APPENDIX C1

EDR LIEN REPORT AND

PROPERTY TAX REPORT

LOVES TRAVEL STOP
HIGHWAY 139
SUSANVILLE, CA 96130

Inquiry Number: 6791772.7S
DECEMBER 20, 2021

EDR Environmental Lien and AUL Search

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Environmental Lien and AUL Search

The EDR Environmental Lien Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

LOVES TRAVEL STOP
HIGHWAY 139
SUSANVILLE, CA 96130

RESEARCH SOURCE

Source 1: LASSEN COUNTY RECORDER'S OFFICE

Source 2: CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

Source 3: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

PROPERTY INFORMATION

Comments: NO DEED FOUND WITHIN SCOPE OF SEARCH.

Legal Description: OLD 107-280-02LLA 2017-04810, 81.00 ACRES

Current Owner: SIERRA PACIFIC INDUSTRIES

Property Identifiers: 107-280-017-000

Comments: NA

EDR Environmental Lien and AUL Search

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

Comments: NONE IDENTIFIED.

OTHER ACTIVITY AND USE LIMITATIONS (AULS)

Other AUL's: Found ☐ Not Found ☒

Comments: NONE IDENTIFIED.

EDR Environmental Lien and AUL Search

MISCELLANEOUS

Comments: NONE IDENTIFIED.

Loves Travel Stop & Country Store
SR36/Skyline Road
Susanville, CA 96130

Inquiry Number: 6821013.6
January 14, 2022

The EDR Property Tax Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

NO COVERAGE

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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APPENDIX C2

AERIAL PHOTOGRAPHS



INQUIRY #: 6821013.11

YEAR: 1967

= 500'

N

EDR


INQUIRY #: 6821013.11
YEAR: 1957
= 500'
N
EDR



INQUIRY #: 6821013.11

YEAR: 1951

= 500'

N

EDR



INQUIRY #: 6821013.11

YEAR: 1941

= 500'

N

EDR

Loves Travel Stop & Country Store

SR36/Skyline Road

Susanville, CA 96130

Inquiry Number: 6821013.11

January 18, 2022

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

01/18/22

Site Name:

Loves Travel Stop & Country S
SR36/Skyline Road
Susanville, CA 96130
EDR Inquiry # 6821013.11

Client Name:

Reno Tahoe Geo Associates, Inc
12000 Old Virginia Street
Reno, NV 18449
Contact: Shane Mulvaney

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1998	1"=500'	Acquisition Date: August 25, 1998	USGS/DOQQ
1981	1"=500'	Flight Date: September 05, 1981	USDA
1978	1"=500'	Flight Date: June 17, 1978	USGS
1967	1"=500'	Flight Date: July 11, 1967	USGS
1957	1"=500'	Flight Date: June 02, 1957	USGS
1951	1"=500'	Flight Date: August 01, 1951	USGS
1941	1"=500'	Flight Date: November 29, 1941	USDA

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INQUIRY #: 6821013.11
YEAR: 2016
= 500'
N
EDR


INQUIRY #: 6821013.11
YEAR: 2012
= 500'
N
EDR


INQUIRY #: 6821013.11
YEAR: 2009
= 500'
N
EDR



INQUIRY #: 6821013.11

YEAR: 2006

= 500'

N

EDR



INQUIRY #: 6821013.11

YEAR: 1998

= 500'

N

EDR



INQUIRY #: 6821013.11

YEAR: 1981

= 500'

N

EDR


INQUIRY #: 6821013.11
YEAR: 1978
= 500'
N
EDR

APPENDIX C3

CITY DIRECTORY SEARCH RESULTS

Loves Travel Stop & Country Store
SR36/Skyline Road
Susanville, CA 96130

Inquiry Number: 6821013.5
January 20, 2022

The EDR-City Directory Image Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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Findings

City Directory Images

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with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2017	☑	☐	EDR Digital Archive
2014	☑	☐	EDR Digital Archive
2010	☑	☐	EDR Digital Archive
2005	☑	☐	EDR Digital Archive
2000	☑	☐	EDR Digital Archive
1995	☑	☐	EDR Digital Archive
1990	☑	☐	Haines Criss-Cross Directory
1986	☐	☐	Haines Criss-Cross Directory
1981	☐	☐	Haines Criss-Cross Directory
1975	☐	☐	Haines Criss-Cross Directory
1971	☐	☐	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

SR36/Skyline Road
Susanville, CA 96130

Year	*CD Image*	*Source*	
SKYLINE DR			
2017	pg A1	EDR Digital Archive	
2014	pg A3	EDR Digital Archive	
2010	pg A5	EDR Digital Archive	
2005	pg A7	EDR Digital Archive	
2000	pg A9	EDR Digital Archive	
SKYLINE RD			
1995	-	EDR Digital Archive	Target and Adjoining not listed in Source
1990	-	Haines Criss-Cross Directory	Street not listed in Source
1986	-	Haines Criss-Cross Directory	Street not listed in Source
1981	-	Haines Criss-Cross Directory	Street not listed in Source
1975	-	Haines Criss-Cross Directory	Street not listed in Source
1971	-	Haines Criss-Cross Directory	Street not listed in Source
STATE ROUTE 36			
2017	pg A2	EDR Digital Archive	
2014	pg A4	EDR Digital Archive	
2010	pg A6	EDR Digital Archive	
2005	pg A8	EDR Digital Archive	
2000	-	EDR Digital Archive	Target and Adjoining not listed in Source
1995	pg A10	EDR Digital Archive	
1990	pg A11	Haines Criss-Cross Directory	
1986	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1981	-	Haines Criss-Cross Directory	Street not listed in Source
1975	-	Haines Criss-Cross Directory	Street not listed in Source
1971	-	Haines Criss-Cross Directory	Street not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

SKYLINE DR 2017

900	DIAMOND MOUNTAIN CASINO & HOTEL
910	DIAMOND MOUNTAIN MINI MART

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

STATE ROUTE 36 2017

693300 NELSON, ALVIN O
693400 GRATRIEX, KARL W
694990 PAPEN, JIM H
695050 MARTIN, JOHN A
695100 GALBREATH, JERRED D
695375 POTTER, RYAN R
695575 CLAUSEN, DAVE
695725 HARRIS, DANIELLE
697000 PANGBORN, GARTH H
697100 CLAYTON, MALCOLM
COWLEY, SHELLI
FISHER, AARON W
HALLMAN, TRACEY
LYONS, PATRICIA
MILLER, RONALD
RODRAME, MARK
SKIDGEL, JEANNE I

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

SKYLINE DR 2014

900 DIAMOND MOUNTAIN CASINO
910 DIAMOND MOUNTAIN MINI MART

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

STATE ROUTE 36 2014

687950 WHITE, KAY E
693300 CRUMP, KATHY
693375 POTTER, RYAN R
693400 GRATRIEX, KARL W
694990 PAPEN, JIM H
695050 MARTIN, JOHN A
695375 OCCUPANT UNKNOWN,
695575 CLAUSEN, DAVE
695725 DIRDEN, PHILIP
697000 HUFF, JULIE
HUG, BRYANT
JOHNSON, WILLIAM L
PANGBORN, GARTH H
697100 BURNS, MARY A
CLAYTON, MALCOLM
FISHER, AARON W
PASSIEUX, KRISTINA
PEARSALL, VERONICA L
RODRAME, MARK

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

SKYLINE DR 2010

900 DIAMOND MOUNTAIN CASINO
910 DIAMOND MOUNTAIN MINI MART

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

STATE ROUTE 36 2010

687950 LINDBLAD, RONALD D
693300 NELSON, ALVIN O
693400 GRATRIEX, KARL W
694754 TRI COUNTRY MARINE
695050 DWYER, SCOTT H
695100 OCCUPANT UNKNOWN,
695375 IMPACT CONSTRUCTION & EXCVTNG
POTTER, RYAN R
695725 DIRDEN, PHILIP
696800 OCCUPANT UNKNOWN,
697000 BUSH, BOBBY
CRAWFORD, R
HUFF, JULIE
HUG, LAURIE
LEBARA, JACKIE
PANGBORN, GARTH H
ROCKY CREST MOBILE HOME PARK
UTTS, TOM
697100 BROWN, LAUREN
CLAYTON, MALCOLM
HURT, ALYSEN
LYONS, PATRICIA
MARKS MOBILE DJ
RODARME, MARK
698345 FORESTRY FIRE STATION

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

SKYLINE DR 2005

900 DIAMOND MOUNTAIN CASINO
910 DIAMOND MOUNTAIN CASINO
DIAMOND MOUNTAIN MINI

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

STATE ROUTE 36 2005

687950 OCCUPANT UNKNOWN,
693300 NELSON, ALVIN O
695050 DWYER, SCOTT H
695100 SCHALL, RICHARD W
695375 POTTER, RYAN
695725 STJOHN, JUDITH A
696800 OCCUPANT UNKNOWN,
697000 ANDERSON, GLENN L
JOHNSON, PATRICIA A
ROCKY CREST MOBILE HOME PARK
697100 ELLIOTT, BRENDA
PARKER, WARREN L
PENN, RICHARD M
RODARME, MARK

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

SKYLINE DR 2000

900 SUSANVILLE CASINO

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

STATE ROUTE 36 1995

691100 PARKER, WARREN
697000 ANDERSON, GLENN L
JOHNSON, WILLIAM L
ROCKY CREST MOBILE PARK

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

STATE ROUTE 36 1990



HWY 36 96130
SUSANVILLE

697	MCCLURE James L	257-4333	+0
NO #	ANDERSON Ethel S	257-3592	
NO #	ANDERSON Glenn L	257-2734	
NO #	ANDERSON Violet M	257-2734	
NO #	ANGULO Beckie	257-0909	+0
NO #	ANGULO Mark	257-0909	+0
NO #	BALDRIDGE E D	257-7451	
NO #	BEALL D P	257-3395	
NO #	BROCKMAN Lew	257-7957	

APPENDIX C4

HISTORICAL TOPOGRAPHIC MAPS

Loves Travel Stop & Country Store
SR36/Skyline Road
Susanville, CA 96130

Inquiry Number: 6821013.4
January 14, 2022

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

01/14/22

Site Name:	Client Name:
Loves Travel Stop & Country S	Reno Tahoe Geo Associates, Inc
SR36/Skyline Road	12000 Old Virginia Street
Susanville, CA 96130	Reno, NV 18449
EDR Inquiry # 6821013.4	Contact: Shane Mulvaney

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Reno Tahoe Geo Associates, Inc were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:		*Coordinates:*	
P.O.#	21166.002	**Latitude:**	40.400274 40° 24' 1" North
Project:	Love s Travel Stops & Country	**Longitude:**	-120.630755 -120° 37' 51" West
		UTM Zone:	Zone 10 North
		UTM X Meters:	701061.52
		UTM Y Meters:	4474880.38
		Elevation:	4154.00' above sea level

Maps Provided:

2018
2015
2012
1995
1988
1975
1954

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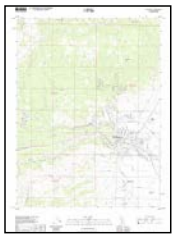
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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2018 Source Sheets



Susanville
2018
7.5-minute, 24000



Johnstonville
2018
7.5-minute, 24000

2015 Source Sheets



Susanville
2015
7.5-minute, 24000



Johnstonville
2015
7.5-minute, 24000

2012 Source Sheets



Susanville
2012
7.5-minute, 24000



Johnstonville
2012
7.5-minute, 24000

1995 Source Sheets



Susanville
1995
7.5-minute, 24000
Aerial Photo Revised 1993

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1988 Source Sheets



Johnstonville
1988
7.5-minute, 24000
Aerial Photo Revised 1984



Susanville
1988
7.5-minute, 24000
Aerial Photo Revised 1984

1975 Source Sheets

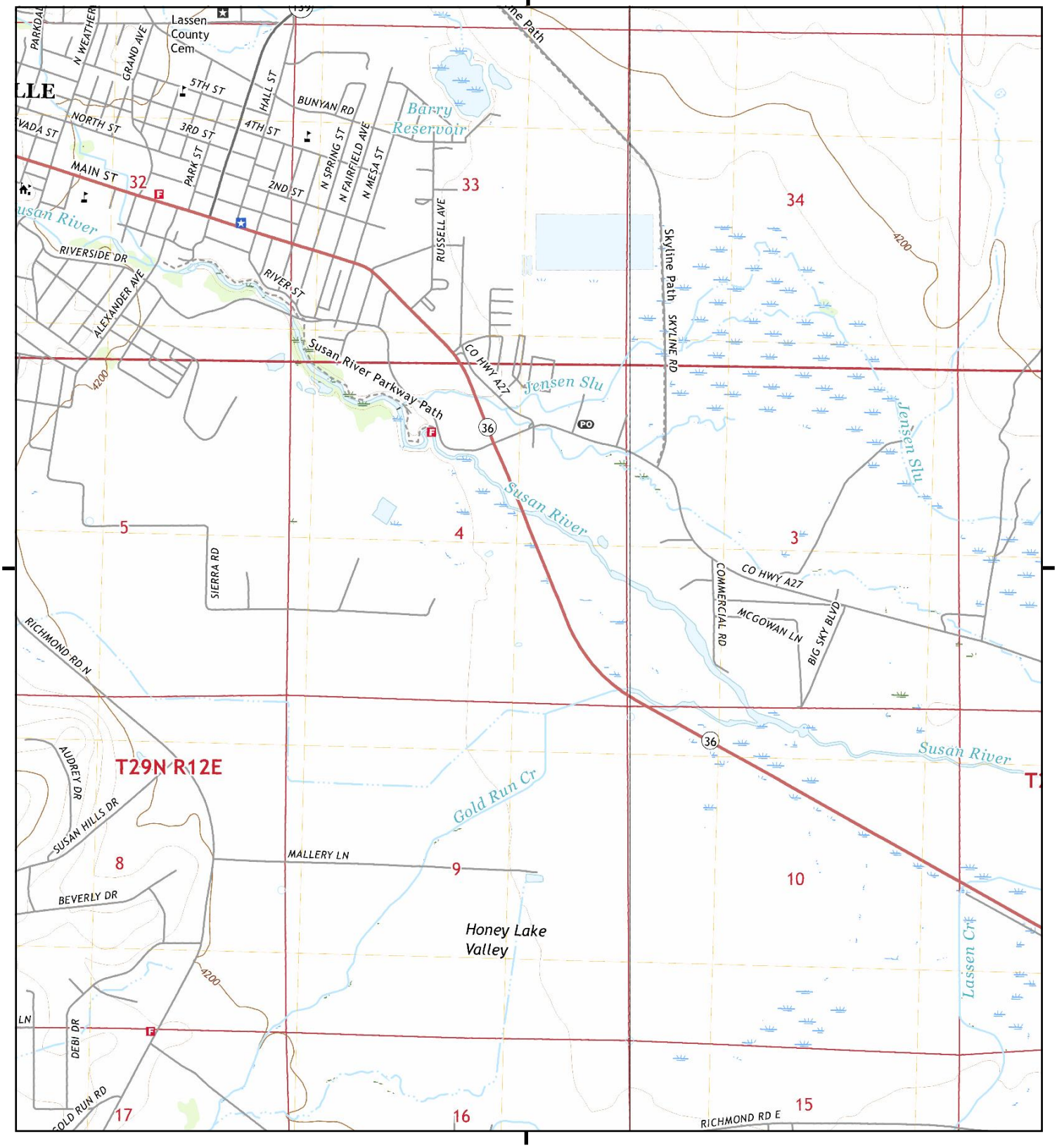


Susanville NE
1975
7.5-minute, 24000
Aerial Photo Revised 1975

1954 Source Sheets



Susanville
1954
15-minute, 62500
Aerial Photo Revised 1951



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

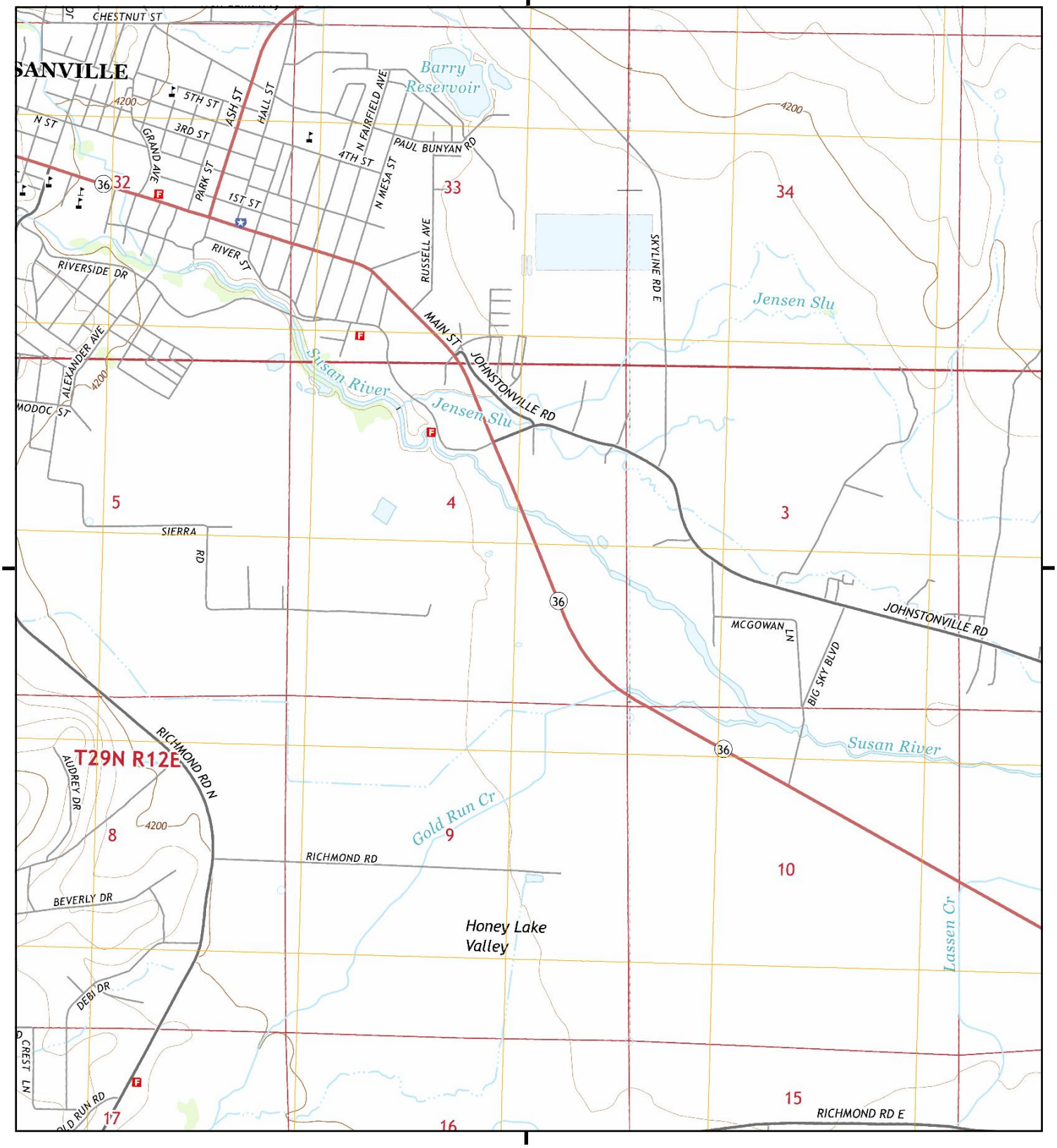
TP, Susanville, 2018, 7.5-minute
NE, Johnstonville, 2018, 7.5-minute

SITE NAME: Loves Travel Stop & Country Store
ADDRESS: SR36/Skyline Road
Susanville, CA 96130
CLIENT: Reno Tahoe Geo Associates, Inc

N

Historical Topo Map

2015



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

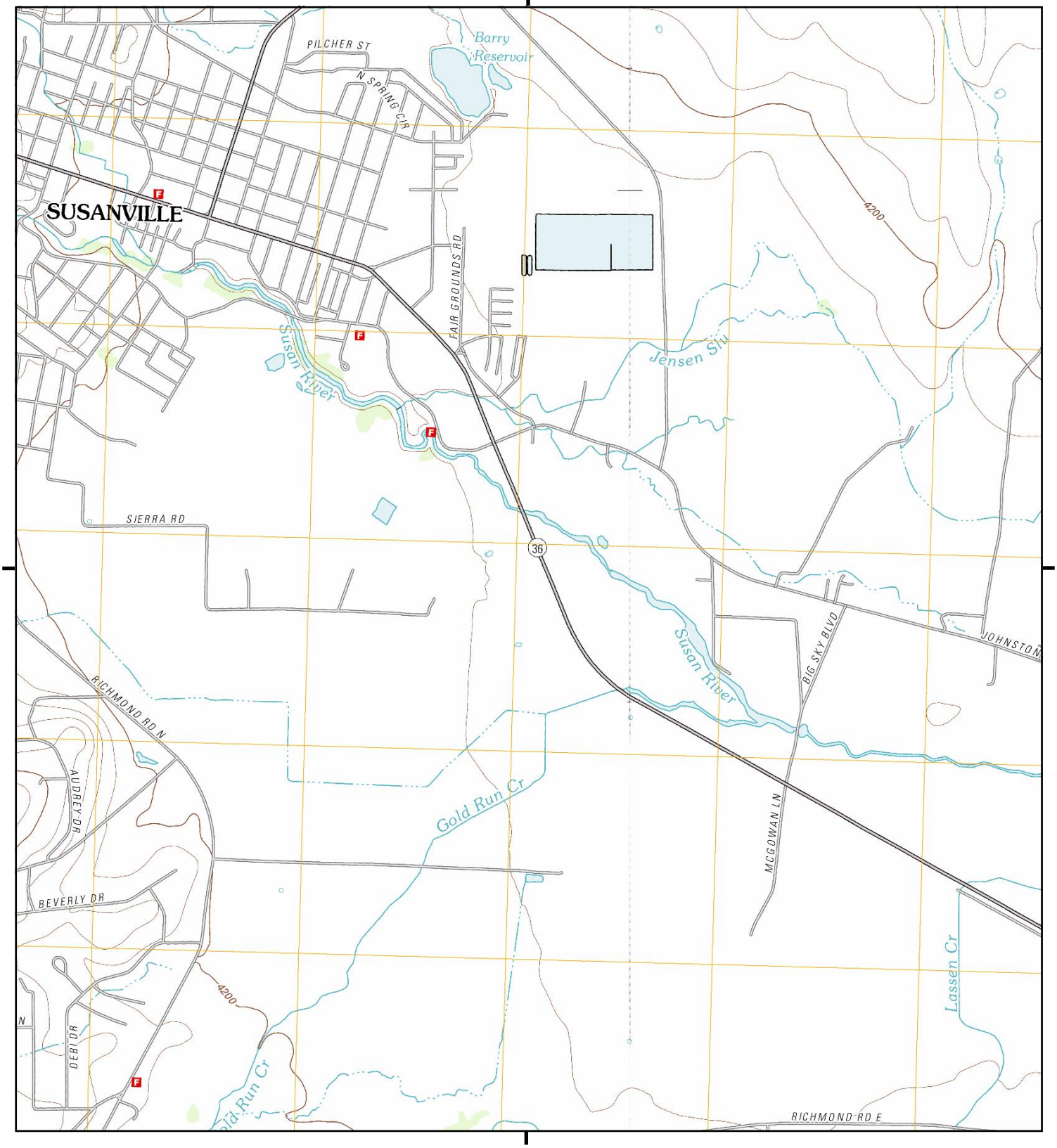
TP, Susanville, 2015, 7.5-minute
NE, Johnstonville, 2015, 7.5-minute

SITE NAME: Loves Travel Stop & Country Store
ADDRESS: SR36/Skyline Road
Susanville, CA 96130
CLIENT: Reno Tahoe Geo Associates, Inc

N

Historical Topo Map

2012



This report includes information from the following map sheet(s).

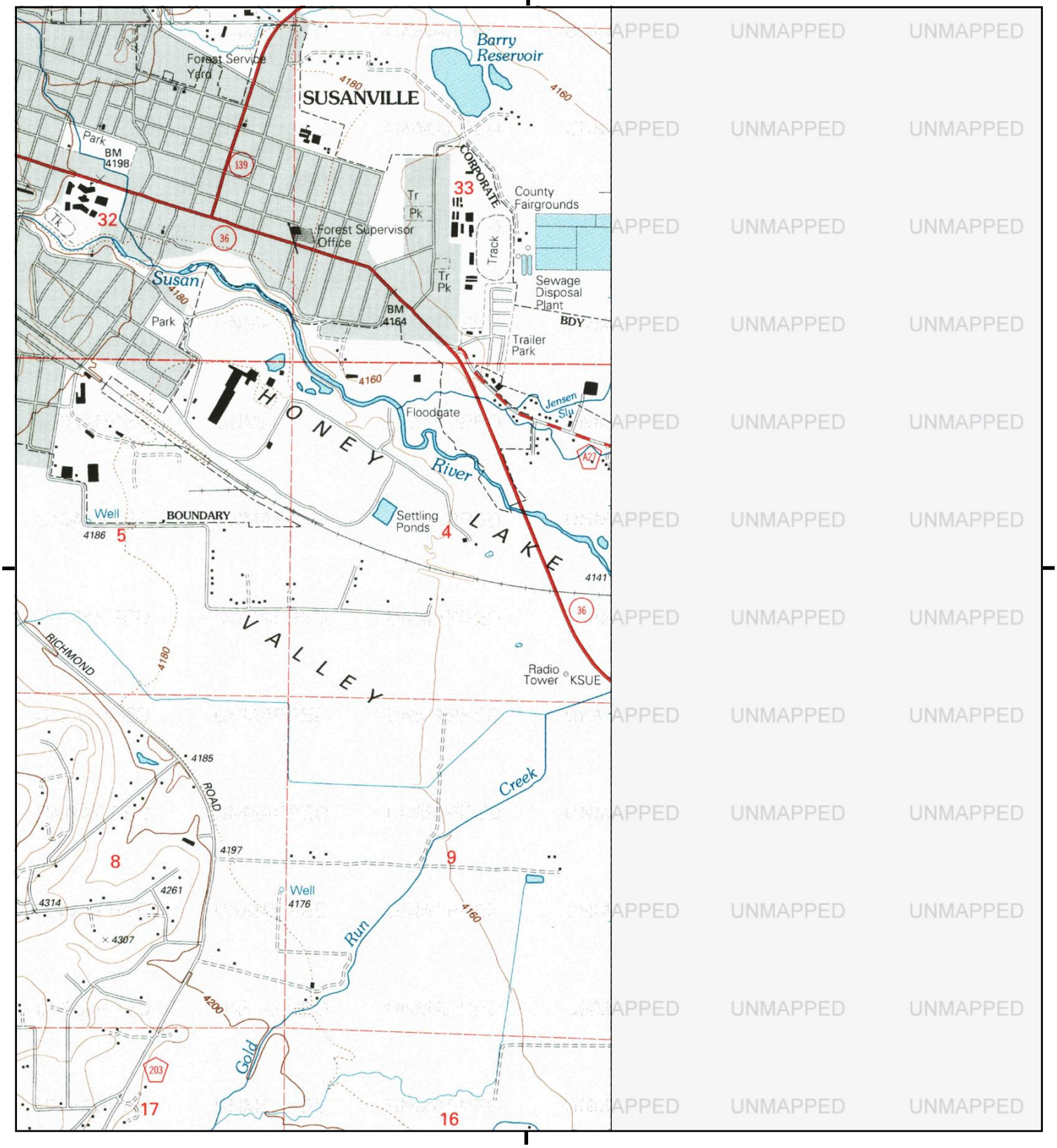
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Susanville, 2012, 7.5-minute
NE, Johnstonville, 2012, 7.5-minute

SITE NAME: Loves Travel Stop & Country Store
ADDRESS: SR36/Skyline Road
Susanville, CA 96130
CLIENT: Reno Tahoe Geo Associates, Inc

N



This report includes information from the following map sheet(s).

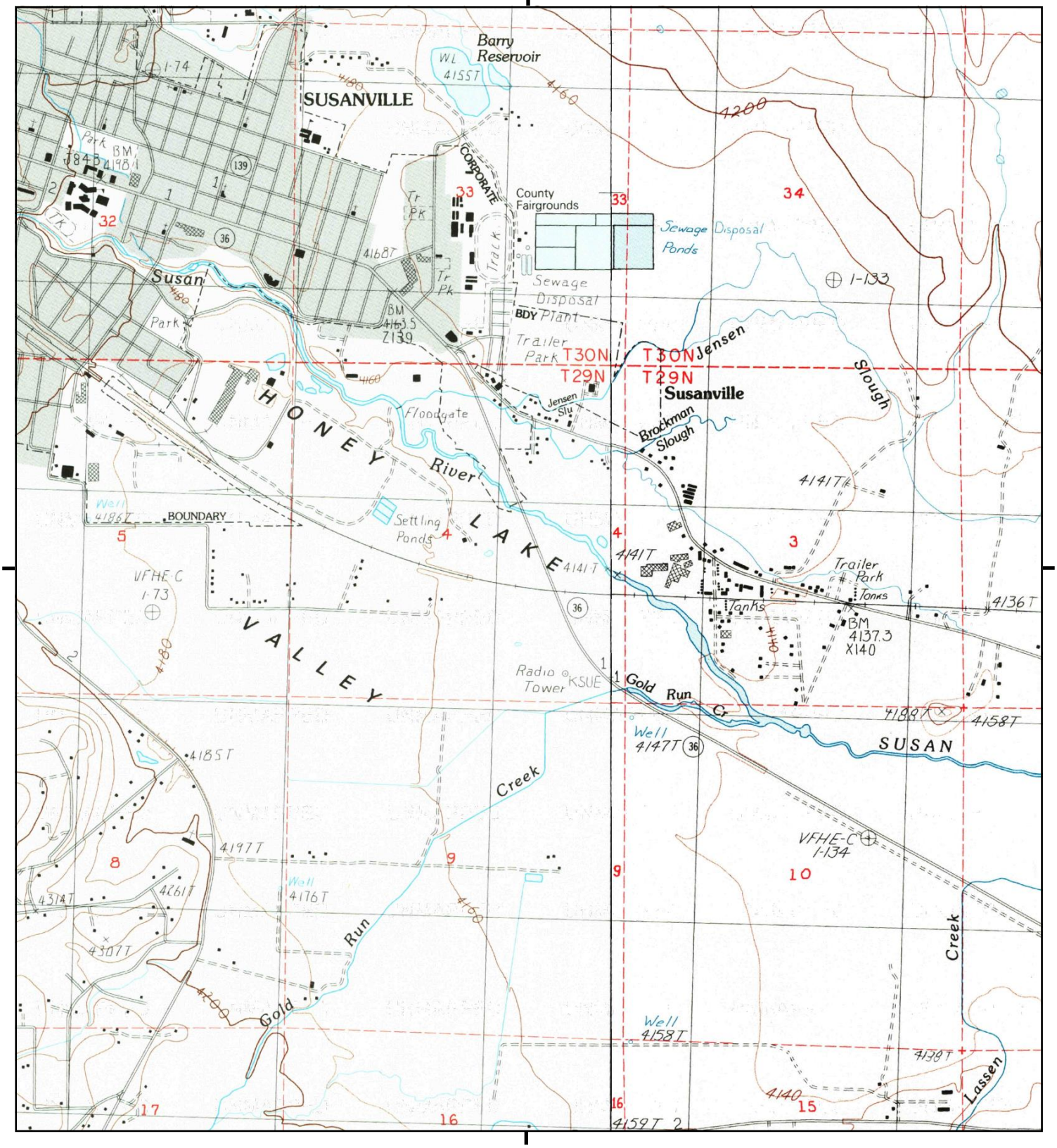
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Susanville, 1995, 7.5-minute

SITE NAME: Loves Travel Stop & Country Store
ADDRESS: SR36/Skyline Road
Susanville, CA 96130
CLIENT: Reno Tahoe Geo Associates, Inc

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Susanville, 1988, 7.5-minute
NE, Johnstonville, 1988, 7.5-minute

SITE NAME: Loves Travel Stop & Country Store
ADDRESS: SR36/Skyline Road
Susanville, CA 96130
CLIENT: Reno Tahoe Geo Associates, Inc

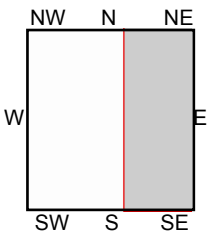
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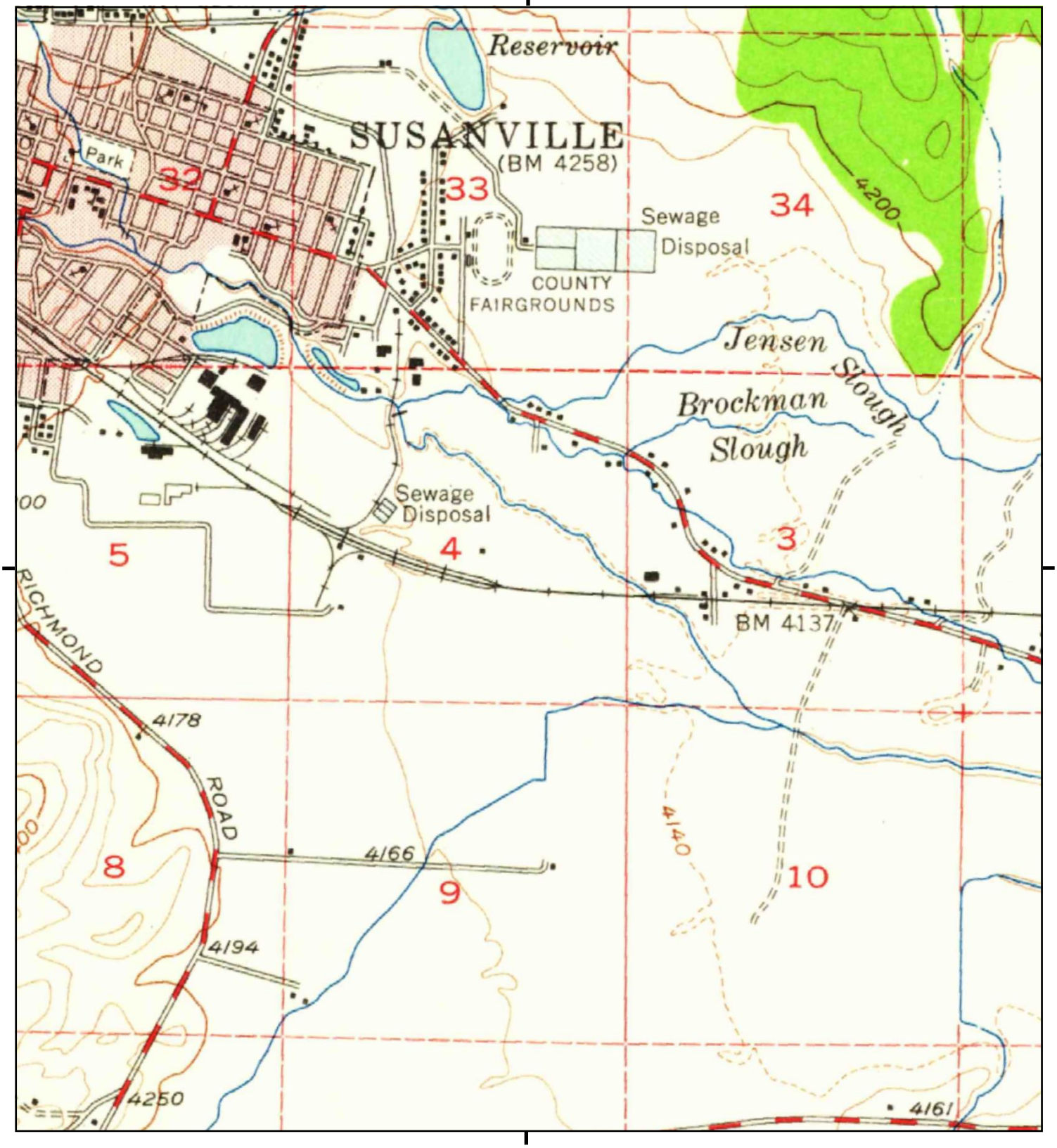
0 Miles 0.25 0.5 1 1.5



NE, Susanville NE, 1975, 7.5-minute

SITE NAME: Loves Travel Stop & Country Store
ADDRESS: SR36/Skyline Road
Susanville, CA 96130
CLIENT: Reno Tahoe Geo Associates, Inc

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Susanville, 1954, 15-minute

SITE NAME: Loves Travel Stop & Country Store
ADDRESS: SR36/Skyline Road
Susanville, CA 96130
CLIENT: Reno Tahoe Geo Associates, Inc

N

APPENDIX C5

BUILDING PERMIT(S)

Loves Travel Stop & Country Store
SR36/Skyline Road
Susanville, CA 96130

Inquiry Number: 6821013.8
January 14, 2022

EDR Building Permit Report

Target Property and Adjoining Properties

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Building Permit Report: Search Documentation

1/14/22

Site Name:
Loves Travel Stop &
SR36/Skyline Road
Susanville, CA 96130

EDR Inquiry # 6821013.8

Client Name:
Reno Tahoe Geo Associates,
12000 Old Virginia Street
Reno, NV 18449

Contact: Shane Mulvaney

Search Documentation

DATA GAP

The complete collection of Building Permit data available to EDR has been searched, and as of 1/14/22, EDR does not have access to building permits in the city where your target property is located (Susanville, CA).

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EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

ASTM and EPA Requirements

ASTM E 1527-13 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records - The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquires (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.

EDR® Environmental Data Resources Inc

BUILD FAX PROPERTY HISTORY

APPENDIX C6

SANBORN MAPS

Loves Travel Stop & Country Store
SR36/Skyline Road
Susanville, CA 96130

Inquiry Number: 6821013.3
January 14, 2022

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

01/14/22

Site Name:

Loves Travel Stop & Country S
SR36/Skyline Road
Susanville, CA 96130
EDR Inquiry # 6821013.3

Client Name:

Reno Tahoe Geo Associates, Inc
12000 Old Virginia Street
Reno, NV 18449
Contact: Shane Mulvaney

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Reno Tahoe Geo Associates, Inc were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 53A1-445C-8F60

PO # 21166.002

Project Love s Travel Stops & Country

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 53A1-445C-8F60

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

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APPENDIX C7

FEMA INFORMATION

JOINS PANEL 1942

FLOODING EFFECTS FROM SUSAN RIVER

ZONE AE
(EL 4164)

4154

4153

4152

4152

Susan River

Susan River

ZONE AE

4151

RIVERSIDE DR

JOHNSTONVILLE RD

MAIN ST

4149

4149

4150

PROFILE BASE LINE

ZONE AE

4148

4147

4146

ZONE AO
(DEPTH 1')

RAILROAD

36

4

3

unty
ed Areas
2

NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 29 NORTH, RANGE 12 EAST.

Gold Run Creek

MAP SCALE 1" = 500'

0 500 1000 FEET

0 150 300 METERS

LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X ZONE D	Areas determined to be outside the 0.2% annual chance floodplain. Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D Boundary
- CBRS and OPA Boundary

This is an official FIRMette showing a portion of the above-referenced flood map created from the MSC FIRMette Web tool. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to make sure the map is current, please see the Flood Hazard Mapping Updates Overview Fact Sheet available on the FEMA Flood Map Service Center home page at https://msc.fema.gov.

APPENDIX C8

NATIONAL WETLANDS INVENTORY MAP

U.S. Fish and Wildlife Service
National Wetlands Inventory

Loves Travel Stops and Country Stores



January 22, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Appendix C

Air Quality, Greenhouse Gases, and Energy

EIR Section Tables

Table x Summary of Maximum Daily Emissions of Criteria Air Pollutants and Precursors from Project Construction

Construction Activity	Emissions (pounds/day)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Maximum Daily Year 1	3	29	30	0	9	5
Maximum Daily Year 2	28	18	25	0	1	1
Threshold of Significance	150	150	550	-	150	150
Exceed Significance Threshold?	No	No	No	No	No	No

Table x Summary of Maximum Daily Emissions of Criteria Air Pollutants and Precursors from Project Operations

Operational Element	Emissions (lbs/day)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	1	0	1	0	0	0
Energy	0	0	0	0	0	0
Mobile	24	13	52	0	3	1
Fueling	21	-	-	-	-	-
Total	46	14	54	0	3	1
Threshold of Significance	150	150	550	-	150	150
Exceed Significance Threshold?	No	No	No	No	No	No

Table x GHGs Emissions in 2027

Emissions Source	CO2e (MT) uncontrolled	CO2e (MT) features	*CO2e (MT) Change*
Construction			
Year 1	195	195	-
Year 2	131	131	-
Operation		-	
Mobile	178	178	-
Area Sources	7	7	-
Electricity	253	236	*-16*
Natural Gas	35	35	-
Water Consumption and Wastewater Generation	6	6	-
Solid Waste	31	31	-
Refrigeration	274	274	-
Total Operational GHG Emissions	783	766	-

	elec	ng
caleemod	253	35
solar	-16	-

Table x. Energy Demands from Project Construction

Emission Source	On-road Vehicle		Off-road Equipment
	Gasoline (gallons)	Diesel (gallons)	Diesel (gallons)
Demolition	158	248	135
Site Preparation	169	0	219
Grading	202	0	273
Building Construction	629	520	108
Paving	151	1,012	66
Architectural Coating	25	0	3
Underground	99	0	16
Total	**1,433**	**1,781**	**821**

Table x. Energy Demands from Project Operation in 2027

Emission Source	Gasoline (gallons)	Diesel (gallons)	Electricity (kWh)

Mobile	158,285	29,586	0
Land Uses	0	0	1,222,846

Table x. Building Energy Demands

Land Use/Energy Type	Electricity Consumption (MWh/year)	Natural Gas (kBtu/year)
Convenience Store	540	0
Gasoline Station	54	0
Fast-Food Counter	158	449,149
Fast-Food Restaurant (with drive-through)	72	205,311
Dog Park	0	0
Parking Areas	291	0
RV Parking	108	0
Total	1,223	654,460

Notes: MWh/year = megawatt-hours per year; MMBtu/year = metric million British thermal units per year

Energy Calculation, supplement to CalEEMod Output

Operational Mobile Energy Demand Summary

Trips Category	Gasoline gallons	Diesel gallons
Passenger Vehicles	26,685	117
Trucks	50,881	9,953
Other Vehicles	80,719	19,516
Total	158,285	29,586

Note: the total trip energy consumptions were summed from non pass-by and pass-by trips. EMFAC default percentage of vehicle types in fleet were used to allocate to trip categories.

Construction Mobile Energy Demand Summary

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix	Fuel	Total Workdays	VMT	Fuel (gallons)
Demolition	Worker	15	11.5600004196	LDA,LDT1,LDT2	Gasoline	23	3988.2	158
Demolition	Hauling	3.11	20	HHDT	Diesel	23	1430.6	248
Site Preparation	Worker	17.5	11.5600004196	LDA,LDT1,LDT2	Gasoline	21	4248.3	169
Site Preparation	Hauling	0	20	HHDT	Diesel	21	0	0
Grading	Worker	20	11.5600004196	LDA,LDT1,LDT2	Gasoline	22	5086.4	202
Grading	Hauling	0	20	HHDT	Diesel	22	0	0
Building Construction	Worker	12.590679999999999	11.5600004196	LDA,LDT1,LDT2	Gasoline	109	15864.76	629
Building Construction	Vendor	3.5707695999999998	9.30000019073	HHDT,MHDT	Diesel	109	3619.689	520
Building Construction	Hauling	0	20	HHDT	Diesel	109	0	0
Paving	Worker	15	11.5600004196	LDA,LDT1,LDT2	Gasoline	22	3814.8	151
Paving	Vendor	34.41	9.30000019073	HHDT,MHDT	Diesel	22	7040.286	1012
Paving	Hauling	0	20	HHDT	Diesel	22	0	0
Architectural Coating	Worker	2.518136	11.5600004196	LDA,LDT1,LDT2	Gasoline	22	640.4124	25
Architectural Coating	Hauling	0	20	HHDT	Diesel	22	0	0
Underground	Worker	5	11.5600004196	LDA,LDT1,LDT2	Gasoline	43	2485.4	99
Underground	Hauling	0	20	HHDT	Diesel	43	0	0

Construction Offroad Equipment Energy Consumption

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor	hp-hr	Gallons/ hp-hr	Gallons of Diesel
Demolition	Concrete/Industrial Saw	Diesel	Average	1	8	33	0.73	264	0.04	8.12
Demolition	Rubber Tired Dozers	Diesel	Average	2	8	367	0.4	5872	0.05	110.29
Demolition	Excavators	Diesel	Average	3	8	36	0.38	864	0.05	16.78
Site Preparation	Rubber Tired Dozers	Diesel	Average	3	8	367	0.4	8808	0.05	165.44
Site Preparation	Tractors/Loaders/Backh	Diesel	Average	4	8	84	0.37	2688	0.05	53.20
Grading	Graders	Diesel	Average	1	8	148	0.41	1184	0.05	25.27
Grading	Rubber Tired Dozers	Diesel	Average	1	8	367	0.4	2936	0.05	55.15
Grading	Tractors/Loaders/Backh	Diesel	Average	2	8	84	0.37	1344	0.05	26.60
Grading	Excavators	Diesel	Average	2	8	36	0.38	576	0.05	11.19
Grading	Scrapers	Diesel	Average	2	8	423	0.48	6768	0.05	155.27
Building Construction	Cranes	Diesel	Average	1	7	367	0.29	2569	0.05	40.43
Building Construction	Forklifts	Diesel	Average	3	8	82	0.2	1968	0.05	20.66
Building Construction	Generator Sets	Diesel	Average	1	8	14	0.74	112	0.08	6.43
Building Construction	Tractors/Loaders/Backh	Diesel	Average	3	7	84	0.37	1764	0.05	34.91
Building Construction	Welders	Diesel	Average	1	8	46	0.45	368	0.03	5.24
Paving	Pavers	Diesel	Average	2	8	81	0.42	1296	0.05	28.11
Paving	Paving Equipment	Diesel	Average	2	8	89	0.36	1424	0.05	26.29
Paving	Rollers	Diesel	Average	2	8	36	0.38	576	0.05	11.73
Architectural Coating	Air Compressors	Diesel	Average	1	6	37	0.48	222	0.03	3.19
Underground	Excavators	Diesel	Average	1	8	36	0.38	288	0.05	5.59
Underground	Skid Steer Loaders	Diesel	Average	1	8	71	0.37	568	0.05	10.74

Note: Energy data based on OFFROAD model Statewide 2026 dataset.

Model Output: OFFROAD2021 (v1.0.7) Emissions Inventory
Region Type: Statewide
Region: California
Calendar Year: 2026
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Year	Vehicle Category	Model Year	Horsepower Bin	Fuel	Fuel Consu	Total_Activ	Total_Popul	Horsepov	gallons/h
Statewide Totals	2026	Construction and Mini	Aggregate	Aggregate	Diesel	4498065	981125.4	3861.4812	#######	0.05
Statewide Totals	2026	Construction and Mini	Aggregate	Aggregate	Diesel	38969557	13151054	22805.738	#######	0.05

Statewide Totals	2026	Construction and Mini	Aggregate	Aggregate	Diesel	5796710	1292531	3541.0441	#######	0.05
Statewide Totals	2026	Construction and Mini	Aggregate	Aggregate	Diesel	42081.88	30284.05	77.146547	#######	0.04
Statewide Totals	2026	Construction and Mini	Aggregate	Aggregate	Diesel	8309742	3756421	9233.2544	#######	0.05
Statewide Totals	2026	Construction and Mini	Aggregate	Aggregate	Diesel	1426504	267971.3	503.18748	#######	0.05
Statewide Totals	2026	Construction and Mini	Aggregate	Aggregate	Diesel	14843144	1701173	5319.1305	#######	0.05
Statewide Totals	2026	Construction and Mini	Aggregate	Aggregate	Diesel	38530373	17460732	34059.135	#######	0.05
Statewide Totals	2026	Light Commercial - Mi	Aggregate	Aggregate	Diesel	4637926	1810593	15793.456	#######	0.08
Statewide Totals	2026	Construction and Mini	Aggregate	Aggregate	Diesel	2524207	776070.9	1603.3467	#######	0.05
Statewide Totals	2026	Construction and Mini	Aggregate	Aggregate	Diesel	2796463	875651.5	1670.5172	#######	0.05
Statewide Totals	2026	Construction and Mini	Aggregate	Aggregate	Diesel	6792374	3544491	8094.5078	#######	0.05
Statewide Totals	2026	Light Commercial - Mi	Aggregate	Aggregate	Diesel	997303.3	899531.5	1286.39	#######	0.03
Statewide Totals	2026	Light Commercial - Mi	Aggregate	Aggregate	Diesel	5162770	3546917	9368.4143	#######	0.03

Solar Calculations

Solar Generation (kWh/year)	Power Content Label (lb CO2e/MWh)	Power Content Label (lb/kWh)	lb CO2e reduction (annual)	MTCO2e reduction (annual)
51000	714	0.714	36414	16.25625

Source: https://www.lmud.org/wp-content/uploads/2023-PCL-Approved.pdf

Fugitive Dust Emissions

On-Road Dust Emissions

Trip Type	Vehicle Type	Total VMT (mi)	Paved Road VMT (mi)	Total Emissions (lbs) PM10	PM2.5
Total	all	1,486,547	1,486,547	938.127	234.532

Assume default of 100% paved roads for trips in Lessen County (CalEEMod default Appendix G21)

Emission Factors

PM10 EF (lbs/VMT)	
Paved Roads	Paved Roads, Corrected
6.6E-4	6.3E-4

Emission factor for travel on paved roads is estimated using Eq 3 and 3a on worksheet "Fugitive Dust EF".
For calculating EF from paved road, the average weight of all vehicles traveling the road is assumed to be 2.4 tons

PM2.5 to PM10 Mass Emission Ratio used in Calculation

Fugitive Dust Source	PM2.5/PM10	Reference
Paved road	0.25	EPA. AP-42. Analysis of the Fine Fraction of Particulate Matter in Fugitive Dust, Final
Unpaved road	0.15	EPA. AP-42. Analysis of the Fine Fraction of Particulate Matter in Fugitive Dust, Final

Fugitive Dust Emission Factors

Travel on Paved Roads

E(lbs/VMT)=(k)(sL)^.91 (W)^1.02

Where:	**PM10**	Unit	Source
k= Particle Size Multiplier:	0.0022	lb/VMT	AP-42 Chapter 13.2.1, Table 13.2.1-1, PM10 emissions
sL= road surface silt loading	0.1	g/m^2	Caleemod default
W= average weight of the vehicles traveling the roa	2.4	tons	Statewide average vehicle weight in CA
PM10 Emission factor	0.00066	lbs/VMT	Public roads

Correction for Natural Precipitation[5]

E(ext)=E[(1-P/4N)]

Where:		Unit	Source	
Eext = annual or other long-term average emission factor		dimensionless		
P=#days/yr with >=0.01 inch precipitation during	61	days	Western Regional Climate Center	SUSANVILLE, CALIFORNIA - Climate Summary
N=# days in averaging period	365	days		
Corrected EF PM10	**0.00063**	lbs/VMT	Public roads	

Sources

[4] EPA. AP 42, Fifth Edition, Volume I, Chapter 13: Miscellaneous Sources, 13.2.1 Paved Road, Eqn. 1

[5] EPA. AP 42, Fifth Edition, Volume I, Chapter 13: Miscellaneous Sources, 13.2.1 Paved Road, Eqn. 2

Operational Mobile Trip Exhaust Emissions and Energy Consumption F&P revised Aug 2025

without drive through window: 40%, and Overnight RV Parking: 50%.
Source: Fehr & Peers, 2024.

ADT and VMT

Trip Type	ADT	Annual Tips	Trip Length (mi)	Annual VMT	EMFAC Population Percent	% of trips pass-by vs new	
Pass-by							
Trucks - Travel Stop	1,073	391645	0.24	92,719	24.5%	90%	pass-by
Passenger Vehicles - Travel Stop	1,954	713210	0.14	101,308	75.2%	85%	non pass-by
Passenger Vehicles - Fast Food	288	105120	0.14	14,932	75.2%	40%	
RVs	20	7300	0.14	1,037	0.3%	50%	
Non Pass-by (new trips)							
Trucks - Travel Stop	120	43800	2.4	105,120	24.5%	10%	
Passenger Vehicles - Travel Stop	344	125560	2.2	276,232	75.2%	15%	
Passenger Vehicles - Fast Food	433	158045	2.2	347,699	75.2%	60%	
RVs	20	7300	75	547,500	0.3%	50%	
			Total VMT	1,486,547			
			Totla Trips	1,551,980			
			VMT per trip check	0.96			

Notes:
Truck ADT from Table 8, Passenger vehicles and RVs ADT are from Table 11 and Table 12.
Pass-by trip lengths, and non pass-by trip lengths for passenger vehicles and RVs are from Fehr & Peer.
Non pass-by truck trip length were not provided and was assumed to be CalEEMod default trip length (mi) for Lessen County.

5280 feet/mi
750 feet, pass-by, passenger vehicles (TIA Table 12)
1250.00 feet, pass-by, trucks at travel stop (TIA Table 12)

Annual Mobile Emission, All Trips

Emission Sources	ROG	NOx	PM10_E	PM2.5_E	PM10_D	PM2.5_D	SOx	CO	CO2e	Diesel	Gasoline	Natural Gas	Electricity
	lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	MT/yr	gal/yr	gal/yr	gal/yr	KWh/yr
Pass-by Trips	6,044	886	9	9	12	4	4	9,369	178	949	8,912	3	1,219
Non Pass-by Trips	2,736	3,989	93	88	166	53	34	9,729	1,607	28,638	149,373	34	8,020
Total	8,780	4,875	102	97	178	57	38	19,098	1,784	29,586	158,285	37	9,239

Note: Dust are brake wear and tire wear only. Fugitive dust in estimated in tab Fugitive Dust.

Annual Mobile Emission, Pass-by Trips

Trips Category	Vehicle	Fuel	EMFAC Population	Percent within Trip Category	Total One-way Trips	One-way Trip Length (mi)	Total VMT	ROG	NOx	PM10_E	PM2.5_E	PM10_D	PM2.5_D	SOx	CO	CO2	CH4	N2O	CO2e	Fuel	Electricity
								lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	MT	(gallons)	(KWh)
Trucks	HHDT	Gasoline	0.385231572	0.0%	7	0.24	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	9	0.0	0.0	0.0	0.4	0.0
Trucks	HHDT	Diesel	187.173635	0.9%	3,562	0.24	843	0.1	29.6	0.1	0.1	0.2	0.1	0.0	0.3	3,102	0.0	0.5	1.5	146.2	0.0
Trucks	HHDT	Electricity	4.185563251	0.0%	80	0.24	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	35.5
Trucks	HHDT	Natural Gas	1.244728304	0.0%	24	0.24	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	18	0.0	0.0	0.0	1.1	0.0
Trucks	LHDT1	Gasoline	1334.280618	6.5%	25,395	0.24	6,012	45.0	43.2	0.1	0.1	1.1	0.4	0.1	245.8	13,442	2.5	3.0	6.5	642.6	0.0
Trucks	LHDT1	Diesel	1508.268838	7.3%	28,707	0.24	6,796	3.8	41.9	0.9	0.8	1.3	0.5	0.1	11.7	9,469	0.2	1.5	4.5	425.9	0.0
Trucks	LHDT1	Electricity	18.00412341	0.1%	343	0.24	81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	52.8
Trucks	LHDT2	Gasoline	109.4077602	0.5%	2,082	0.24	493	2.3	3.1	0.0	0.0	0.1	0.0	0.0	16.6	1,179	0.2	0.2	0.6	56.8	0.0
Trucks	LHDT2	Diesel	508.9585937	2.5%	9,687	0.24	2,293	1.0	8.4	0.2	0.2	0.5	0.2	0.0	2.8	3,934	0.0	0.6	1.9	177.2	0.0
Trucks	LHDT2	Electricity	4.480643746	0.0%	85	0.24	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	12.9
Trucks	MDV	Gasoline	8172.316212	39.7%	155,543	0.24	36,824	439.8	184.0	1.0	1.0	1.5	0.5	0.7	2035.7	72,298	44.1	15.9	35.3	1905.5	0.0
Trucks	MDV	Diesel	159.7230091	0.8%	3,040	0.24	720	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.7	686	0.0	0.1	0.3	30.7	0.0
Trucks	MDV	Electricity	102.2787733	0.5%	1,947	0.24	461	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	177.9
Trucks	MDV	Gasoline	8172.316212	39.7%	155,543	0.24	36,824	89.8	42.4	0.7	0.6	1.0	0.3	0.4	554.5	42,450	16.4	7.3	20.3	1905.5	0.0
Trucks	MHDT	Gasoline	63.58641321	0.3%	1,210	0.24	287	0.0	4.7	0.0	0.0	0.0	0.0	0.0	0.1	703	0.0	0.1	0.3	57.7	0.0
Trucks	MHDT	Diesel	220.9063522	1.1%	4,204	0.24	995	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0	0.0	0.0	0.0	113.7	0.0
Trucks	MHDT	Electricity	6.094151004	0.0%	116	0.24	27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	58	0.0	0.0	0.0	0.0	30.4
Trucks	MHDT	Natural Gas	3.62628382	0.0%	69	0.24	16	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.7	70	0.0	0.0	0.0	2.2	0.0
Passenger Vehicles	OBUS	Gasoline	35.19722285	0.1%	456	0.14	65	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	194	0.0	0.0	0.1	13.8	0.0
Passenger Vehicles	OBUS	Diesel	19.74509865	0.0%	256	0.14	36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	5.0	0.0
Passenger Vehicles	OBUS	Electricity	0.194210789	0.0%	3	0.14	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1	0.0	0.0	0.0	0.0	0.4
Passenger Vehicles	SBUS	Gasoline	7.149445991	0.0%	93	0.14	13	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	32	0.0	0.0	0.0	1.3	0.0
Passenger Vehicles	SBUS	Diesel	32.98110574	0.1%	427	0.14	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	7.2	0.0
Passenger Vehicles	SBUS	Electricity	0.817522197	0.0%	11	0.14	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	9	0.0	0.0	0.0	0.0	1.6
Passenger Vehicles	UBUS	Gasoline	2.374233818	0.0%	31	0.14	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9	0.0	0.0	0.0	0.9	0.0
Passenger Vehicles	UBUS	Diesel	5.320888212	0.0%	69	0.14	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.9	0.0
Passenger Vehicles	UBUS	Electricity	0.001179709	0.0%	0	0.14	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0
Passenger Vehicles	MCY	Gasoline	1353.139685	2.1%	17,516	0.14	2,488	26.7	10.2	0.1	0.1	0.1	0.0	0.0	139.0	4,128	2.8	1.3	2.1	65.6	0.0
Passenger Vehicles	LDA	Gasoline	16891.91666	26.7%	218,661	0.14	31,060	2.3	14.1	1.0	0.9	1.1	0.3	0.2	34.8	16,791	0.1	2.6	7.9	1034.4	0.0
Passenger Vehicles	LDA	Diesel	65.72081533	0.1%	851	0.14	121	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	2.9	0.0
Passenger Vehicles	LDA	Electricity	1177.084358	1.9%	15,237	0.14	2,164	9.3	4.1	0.1	0.1	0.1	0.0	0.0	53.6	2,782	1.6	0.7	1.4	0.0	835.6
Passenger Vehicles	LDA	Gasoline	16891.91666	26.7%	218,661	0.14	31,060	950.4	273.8	2.0	1.8	1.3	0.4	0.7	4477.3	68,997	75.6	22.5	35.0	1034.4	0.0
Passenger Vehicles	LDT1	Gasoline	2390.591493	3.8%	30,946	0.14	4,396	2.4	13.4	2.5	2.4	0.2	0.1	0.0	16.1	4,257	0.1	0.7	2.0	183.9	0.0
Passenger Vehicles	LDT1	Diesel	0.603916683	0.0%	8	0.14	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0
Passenger Vehicles	LDT1	Electricity	5.954235476	0.0%	77	0.14	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	14	0.0	0.0	0.0	0.0	4.2
Passenger Vehicles	LDT1	Gasoline	2390.591493	3.8%	30,946	0.14	4,396	57.7	25.9	0.2	0.1	0.2	0.1	0.1	306.2	9,253	6.4	2.7	4.6	183.9	0.0
Passenger Vehicles	LDT2	Gasoline	10905.38196	17.3%	141,167	0.14	20,052	1.1	2.5	0.3	0.3	0.8	0.2	0.1	11.3	14,010	0.1	2.2	6.6	836.2	0.0
Passenger Vehicles	LDT2	Diesel	39.95974829	0.1%	517	0.14	73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	2.3	0.0
Passenger Vehicles	LDT2	Electricity	95.31059164	0.2%	1,234	0.14	175	0.7	0.3	0.0	0.0	0.0	0.0	0.0	4.3	251	0.1	0.1	0.1	0.0	67.7
Passenger Vehicles	LDT2	Gasoline	10905.38196	17.3%	141,167	0.14	20,052	4404.0	172.4	0.2	0.2	2.5	0.8	0.9	1383.8	93,910	13.7	15.8	44.7	836.2	0.0
RVs	MH	Gasoline	166.213053	66.8%	4,879	0.14	693	7.3	5.4	0.0	0.0	0.1	0.0	0.0	72.0	3,107	0.6	0.4	1.5	152.6	0.0
RVs	MH	Diesel	82.45626284	33.2%	2,421	0.14	344	0.1	3.9	0.1	0.1	0.0	0.0	0.0	0.4	826	0.0	0.1	0.4	36.9	0.0
			84043.24095				lb/yr	6,044	886	9	9	12	4	4	9,369	lb/yr			178		1,219
Notes:							tpy	3.02	0.44	0.00	0.00	0.01	0.00	0.00	4.68	tons/yr			MT/yr GHG		KWh/yr
PM emissions: E= engine exhaust emission; D=Dust of vehicle break wear and tire wear.							lb/day	16.56	2.43	0.03	0.02	0.03	0.01	0.01	25.67	lbs/day					
The calculation is based on the emission rates in sheet "EMFAC EF".																					

Annual Mobile Emission, Non Pass-by Trips

Trips Category	Vehicle	Fuel	EMFAC Population	Percent within Trip Category	Total One-way Trips	One-way Trip Length (mi)	Total VMT	ROG	NOx	PM10_E	PM2.5_E	PM10_D	PM2.5_D	SOx	CO	CO2	CH4	N2O	CO2e	Fuel	Electricity
								lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	MT	(gallons)	(KWh)
Trucks	HHDT	Gasoline	0.385231572	0.0%	7	2.4	18	0.1	0.2	0.0	0.0	0.0	0.0	0.0	1.6	81	0.0	0.0	0.0	4.3	0.0
Trucks	HHDT	Diesel	187.173635	0.9%	3,562	2.4	8,550	0.7	81.4	0.6	0.6	2.3	0.7	0.3	2.6	31,447	0.0	5.0	14.9	1481.8	0.0

Trucks	HHDT	Electricity	4.185563251	0.0%	80	2.4	191	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	359.6
Trucks	HHDT	Natural Gas	1.244728304	0.0%	24	2.4	57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	181	0.0	0.0	0.1	11.2	0.0
Trucks	LHDT1	Gasoline	1334.280618	6.5%	25,395	2.4	60,949	58.6	92.9	0.4	0.4	11.6	3.9	1.2	555.7	122,830	5.0	5.4	56.4	6514.0	0.0
Trucks	LHDT1	Diesel	1508.268838	7.3%	28,707	2.4	68,896	38.9	424.5	9.0	8.6	13.7	4.6	0.9	118.7	95,993	1.8	15.1	45.4	4317.5	0.0
Trucks	LHDT1	Electricity	18.00412341	0.1%	343	2.4	822	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	535.6
Trucks	LHDT2	Gasoline	109.4077602	0.5%	2,082	2.4	4,998	2.7	5.0	0.0	0.0	1.1	0.4	0.1	27.6	10,868	0.2	0.3	5.0	575.4	0.0
Trucks	LHDT2	Diesel	508.9585937	2.5%	9,687	2.4	23,249	10.0	84.9	2.4	2.3	5.3	1.8	0.4	28.2	39,886	0.5	6.3	18.9	1796.2	0.0
Trucks	LHDT2	Electricity	4.480643746	0.0%	85	2.4	205	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	131.1
Trucks	MDV	Gasoline	8172.316212	39.7%	155,543	2.4	373,303	457.8	278.4	2.3	2.2	15.2	4.7	3.9	2933.2	391,906	48.1	22.5	181.1	19317.0	0.0
Trucks	MDV	Diesel	159.7230091	0.8%	3,040	2.4	7,296	0.4	1.0	0.1	0.1	0.3	0.1	0.1	6.8	6,958	0.0	1.1	3.3	310.8	0.0
Trucks	MDV	Electricity	102.2787733	0.5%	1,947	2.4	4,672	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	1803.8
Trucks	MDV	Gasoline	8172.316212	39.7%	155,543	2.4	373,303	91.1	45.1	1.2	1.1	10.0	2.8	1.4	731.7	146,614	16.8	7.8	67.7	19317.0	0.0
Trucks	MHDT	Gasoline	63.58641321	0.3%	1,210	2.4	2,905	0.2	13.7	0.1	0.1	0.4	0.1	0.1	0.6	7,129	0.0	1.1	3.4	584.5	0.0
Trucks	MHDT	Diesel	220.9063522	1.1%	4,204	2.4	10,091	0.0	0.0	0.0	0.0	0.8	0.2	0.0	0.0	0	0.0	0.0	0.0	1152.8	0.0
Trucks	MHDT	Electricity	6.094151004	0.0%	116	2.4	278	0.0	0.1	0.0	0.0	0.0	0.0	0.0	1.7	585	0.4	0.1	0.3	0.0	308.1
Trucks	MHDT	Natural Gas	3.62628382	0.0%	69	2.4	166	0.1	0.3	0.0	0.0	0.0	0.0	0.0	1.2	663	0.0	0.0	0.3	22.6	0.0
Passenger Vehicles	OBUS	Gasoline	35.19722285	0.1%	157.90144	2.2	347	0.1	2.0	0.0	0.0	0.1	0.0	0.0	0.2	1,042	0.0	0.2	0.5	74.0	0.0
Passenger Vehicles	OBUS	Diesel	19.74509865	0.0%	88.580272	2.2	195	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	26.9	0.0
Passenger Vehicles	OBUS	Electricity	0.194210789	0.0%	0.8712666	2.2	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4	0.0	0.0	0.0	0.0	2.1
Passenger Vehicles	SBUS	Gasoline	7.149445991	0.0%	32.073776	2.2	71	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	174	0.0	0.0	0.1	7.1	0.0
Passenger Vehicles	SBUS	Diesel	32.98110574	0.1%	147.95952	2.2	326	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	38.8	0.0
Passenger Vehicles	SBUS	Electricity	0.817522197	0.0%	3.6675602	2.2	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	34	0.0	0.0	0.0	0.0	8.5
Passenger Vehicles	UBUS	Gasoline	2.374233818	0.0%	10.651265	2.2	23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50	0.0	0.0	0.0	5.0	0.0
Passenger Vehicles	UBUS	Diesel	5.320888212	0.0%	23.870518	2.2	53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	5.0	0.0
Passenger Vehicles	UBUS	Electricity	0.001179709	0.0%	0.0052924	2.2	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0
Passenger Vehicles	MCY	Gasoline	1353.139685	2.1%	6070.4423	2.2	13,355	9.5	4.7	0.1	0.1	0.5	0.1	0.1	68.9	9,102	1.0	0.6	4.2	352.4	0.0
Passenger Vehicles	LDA	Gasoline	16891.91666	26.7%	75780.355	2.2	166,717	12.1	75.6	5.2	5.0	6.1	1.8	0.9	186.7	90,125	0.6	14.2	42.6	5552.5	0.0
Passenger Vehicles	LDA	Diesel	65.72081533	0.1%	294.83609	2.2	649	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	15.7	0.0
Passenger Vehicles	LDA	Electricity	1177.084358	1.9%	5280.6246	2.2	11,617	3.3	1.5	0.0	0.0	0.3	0.1	0.0	24.4	4,410	0.6	0.3	2.0	0.0	4485.3
Passenger Vehicles	LDA	Gasoline	16891.91666	26.7%	75780.355	2.2	166,717	346.2	166.6	1.6	1.5	6.8	2.1	1.4	2272.6	143,063	29.8	12.4	66.8	5552.5	0.0
Passenger Vehicles	LDT1	Gasoline	2390.591493	3.8%	10724.649	2.2	23,594	13.0	72.1	13.3	12.7	1.0	0.3	0.2	86.6	22,848	0.6	3.6	10.8	987.1	0.0
Passenger Vehicles	LDT1	Diesel	0.603916683	0.0%	2.7092852	2.2	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.3	0.0
Passenger Vehicles	LDT1	Electricity	5.954235476	0.0%	26.711834	2.2	59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	21	0.0	0.0	0.0	0.0	22.7
Passenger Vehicles	LDT1	Gasoline	2390.591493	3.8%	10724.649	2.2	23,594	20.7	12.8	0.1	0.1	0.9	0.3	0.2	151.7	20,152	2.4	1.3	9.3	987.1	0.0
Passenger Vehicles	LDT2	Gasoline	10905.38196	17.3%	48923.62	2.2	107,632	5.9	13.6	1.4	1.4	4.3	1.3	0.7	60.8	75,200	0.3	11.8	35.5	4488.5	0.0
Passenger Vehicles	LDT2	Diesel	39.95974829	0.1%	179.26704	2.2	394	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	12.3	0.0
Passenger Vehicles	LDT2	Electricity	95.31059164	0.2%	427.58146	2.2	941	0.2	0.1	0.0	0.0	0.0	0.0	0.0	2.0	354	0.0	0.0	0.2	0.0	363.2
Passenger Vehicles	LDT2	Gasoline	10905.38196	17.3%	48923.62	2.2	107,632	1544.7	193.1	0.5	0.5	13.7	4.5	4.5	928.4	452,865	8.9	12.9	207.1	4488.5	0.0
RVs	MH	Gasoline	166.213053	66.8%	4879.3929	75.0	365,954	61.3	369.6	1.2	1.1	46.4	15.3	13.6	1323.4	1,372,612	11.2	18.0	624.9	80566.3	0.0
RVs	MH	Diesel	82.45626284	33.2%	2420.6071	75.0	181,546	58.2	2049.5	53.1	50.8	24.6	8.0	4.1	212.2	436,131	2.7	68.7	206.1	19479.6	0.0
			84043.24095				lb/yr	2,736	3,989	93	88	166	53	34	9,729	lb/yr			1606.773		8020.011
Notes:							tpy	1.37	1.99	0.05	0.04	0.08	0.03	0.02	4.86	tons/yr			MT/yr GHG		KWh/yr
PM emissions: E= engine exhaust emission; D=Dust of vehicle break wear and tire wear.							lb/day	7.50	10.93	0.25	0.24	0.45	0.15	0.09	26.65	lbs/day					
The calculation is based on the emission rates in sheet "EMFAC EF".																					

Emission Factors based on VMT and Trips

Summed columns in EMFAC: AQ, M, X, Q, AB,A, U,V, BK, BG, AE, AI, AM, AS,AV,A, O, Z, S, BM, BI, AG, AK, AO

		VMT-based (g/mile)											Trip-based (g/trip)												Electricity
Vehicle Category	Fuel	ROG	NOx	PM10	PM2.	PM10	PM2.	SOx	CO	CO2	CH4	N2O	ROG	NOx	PM10	PM2.5_	PM10	PM2.	SOx	CO	CO2	CH4	N2O	Fuel (gallons/mi)	(KWh/mi)
HHDT	Gasoline	1.055538	6.41	0	0	0.13	0.04	0.02	33.6	2069	0.19	0.2093	1.504661	0.0483	0	0.0007	0	0	0	16.9	75.08	0	0	0.245920395	0
HHDT	Diesel	0.037364	3.05	0.03	0.03	0.12	0.04	0.02	0.14	1668	0	0.2628	0	3.0465	0	0	0	0	0	0	0	0	0	0.173316187	0
HHDT	Electricity	0	0	0	0	0.08	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.880825823
HHDT	Natural Gas	0.001235	0.09	0	0	0.25	0.08	0	9.05	1447	0.09	0.295	0	0	0	0	0	0	0	0	0	0	0	0.19675045	0
LHDT1	Gasoline	0.111795	0.41	0	0	0.09	0.03	0.01	2.56	903	0.02	0.02	0.778061	0.6746	0	0.00057	0	0	0	3.78	26.28	0.04	0.05	0.106877573	0
LHDT1	Diesel	0.255937	2.79	0.06	0.06	0.09	0.03	0.01	0.78	632	0.01	0.0996	0	0	0	0	0	0	0	0	0	0	0	0.062666426	0
LHDT1	Electricity	0	0	0	0	0.05	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.651294335
LHDT2	Gasoline	0.038495	0.18	0	0	0.1	0.03	0.01	1.11	976	0.01	0.0105	0.49704	0.6419	0	0.00027	0	0	0	3.35	25.82	0.03	0.05	0.115142394	0
LHDT2	Diesel	0.195851	1.66	0.05	0.04	0.1	0.03	0.01	0.55	778	0.01	0.1226	0	0	0	0	0	0	0	0	0	0	0	0.077260433	0
LHDT2	Electricity	0	0	0	0	0.05	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.640428008
MDV	Gasoline	0.024311	0.13	0	0	0.02	0.01	0	1.21	431	0.01	0.0089	1.276802	0.5064	0	0.0024	0	0	0	5.65	108.8	0.13	0.04	0.051746011	0
MDV	Diesel	0.022664	0.06	0.01	0.01	0.02	0.01	0	0.42	433	0	0.0682	0	0	0	0	0	0	0	0	0	0	0	0.042595744	0
MDV	Electricity	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.386082534
MDV	Gasoline	0.001677	0	0	0	0.01	0	0	0.24	140	0	0.0006	0.261598	0.1227	0	0.00175	0	0	0	1.56	90.55	0.05	0.02	0.051746011	0
MHDT	Gasoline	0.067027	0.45	0	0	0.06	0.02	0.02	1.55	1701	0.01	0.0219	0.668665	0.4332	0	0.00057	0	0	0	6.48	47.26	0.05	0.03	0.20123496	0
MHDT	Diesel	0.02796	1.55	0.01	0.01	0.06	0.02	0.01	0.09	1113	0	0.1754	0	1.4109	0	0	0	0	0	0	0	0	0	0.114243968	0
MHDT	Electricity	0	0	0	0	0.03	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.10694092
MHDT	Natural Gas	0.008615	0.18	0	0	0.06	0.02	0	2.82	953	0.6	0.1942	0	0	0	0	0	0	0	0	0	0	0	0.136321031	0
OBUS	Gasoline	0.068156	0.49	0	0	0.06	0.02	0.02	1.55	1803	0.01	0.0234	0.494817	0.4892	0	0.00023	0	0	0	4.09	32.15	0.04	0.03	0.213140367	0
OBUS	Diesel	0.093043	1.89	0.04	0.04	0.07	0.02	0.01	0.28	1361	0	0.2144	0	1.5435	0	0	0	0	0	0	0	0	0	0.137788855	0
OBUS	Electricity	0	0	0	0	0.03	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1037625
SBUS	Gasoline	0.042617	0.46	0	0	0.05	0.02	0.01	1.07	808	0.01	0.0256	0.929189	0.7917	0	0.00058	0	0	0	13	61.9	0.08	0.07	0.100152497	0
SBUS	Diesel	0.052716	3.31	0.02	0.02	0.06	0.02	0.01	0.17	1116	0	0.1759	0	0.5408	0	0	0	0	0	0	0	0	0	0.119195349	0
SBUS	Electricity	0	0	0	0	0.03	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.055051563
UBUS	Gasoline	0.012851	0.19	0	0	0.12	0.04	0.02	0.24	1835	0	0.0176	0.69119	0.9208	0	0.00105	0	0	0	12.8	127	0.14	0.09	0.21402307	0
UBUS	Diesel	0.049465	0.25	0	0	0.13	0.04	0.01	0.05	966	0	0.1522	0	0	0	0	0	0	0	0	0	0	0	0.095095517	0
UBUS	Electricity	0	0	0	0	0.07	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.747813468
MCY	Gasoline	1.535631	0.69	0	0	0.02	0.01	0	16.2	205	0.22	0.0449	9.153012	0.1677	0	0.00323	0	0	0	10.1	56.61	0.23	0.01	0.026383473	0
LDA	Gasoline	0.009412	0.04	0	0	0.02	0	0	0.75	279	0	0.0048	0.691318	0.2569	0	0.00183	0	0	0	3.49	67.32	0.07	0.03	0.033304794	0
LDA	Diesel	0.032859	0.21	0.01	0.01	0.02	0.01	0	0.51	245	0	0.0386	0	0	0	0	0	0	0	0	0	0	0	0.024145191	0
LDA	Electricity	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.386082534
LDA	Gasoline	0.001718	0	0	0	0.01	0	0	0.24	144	0	0.0007	0.276318	0.1227	0	0.00172	0	0	0	1.56	62.4	0.05	0.02	0.033304794	0
LDT1	Gasoline	0.04903	0.21	0	0	0.02	0.01	0	2.1	347	0.01	0.0135	1.964473	0.5384	0	0.00343	0	0	0	8.99	93.9	0.16	0.04	0.041836454	0
LDT1	Diesel	0.249616	1.39	0.26	0.24	0.02	0.01	0	1.67	439	0.01	0.0692	0	0	0	0	0	0	0	0	0	0	0	0.04325212	0
LDT1	Electricity	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.386082534
LDT1	Gasoline	0.001565	0	0	0	0.01	0	0	0.22	131	0	0.0006	0.241338	0.1227	0	0.00123	0	0	0	1.56	66.49	0.05	0.02	0.041836454	0
LDT2	Gasoline	0.013948	0.08	0	0	0.02	0.01	0	0.94	348	0	0.0065	0.843989	0.3679	0	0.00192	0	0	0	4.35	86.15	0.09	0.04	0.041702354	0
LDT2	Diesel	0.024863	0.06	0.01	0.01	0.02	0.01	0	0.26	317	0	0.0499	0	0	0	0	0	0	0	0	0	0	0	0.031205963	0
LDT2	Electricity	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.386082534
LDT2	Gasoline	0.001645	0	0	0	0.01	0	0	0.23	138	0	0.0006	0.247206	0.1227	0	0.00149	0	0	0	1.56	72.85	0.05	0.02	0.041702354	0
MH	Gasoline	0.083179	0.6	0	0	0.06	0.02	0.02	2.02	1894	0.02	0.0334	14.13875	0.4686	0	0.00043	0	0	0	4.16	32.77	0.04	0.05	0.22015381	0
MH	Diesel	0.145419	5.12	0.13	0.13	0.06	0.02	0.01	0.53	1090	0.01	0.1717	0	0	0	0	0	0	0	0	0	0	0	0.107298587	0
LDA,LDT1,LDT2	Gasoline	0.030355	0.13	0	0	0.02	0.01	0	1.47	330	0.01	0.0096	1.366063	0.4254	0	0.00265	0	0	0	6.46	85.32	0.12	0.04	0.039670014	0
HHDT,MHDT	Diesel	0.032662	2.3	0.02	0.02	0.09	0.03	0.01	0.12	1391	0	0.2191	0	2.2287	0	0	0	0	0	0	0	0	0	0.143780078	0

Notes:

Assume Worker Fleet = 25/50/25 percent mix of light duty autos, light duty truck class 1, and light duty truck class 2

EMFAC Emission Types Used to Estimate Onroad Emission Rates

Pollutant group	VMT-based (g/mile)	Trip-based (g/trip)	Idle/Diurnal-based
TOG, ROG	RUNEX	STREX,	IDLEX, DIURN
Gases	RUNEX	STREX	IDLEX
PM - Exhaust	RUNEX	STREX	IDLEX
PM - Dust	PMTW, PMBW		

Acronyms:

RUNEX	Running exhaust	g/mile
PMBW	PM brake wear	g/mile
PMTW	PM tire wear	g/mile
STREX	Start exhaust	g/trip
HOTSOAK	Hot Soak evaporative	g/trip
RUNLOSS	Running Loss evaporative	g/trip
IDLEX	Idle exhaust	g/vehicle/day
DIURN	Diurnal Loss evaporative	g/vehicle/day

Convert NG BTU to Electricty BTU
Assumes energy (in BTU) to replace Natural Gas (assuming no NG allowed) taken over by Electricity
Assumes 1:1 relationship (change adjustments for efficiency)

Values for caleemod default run in grey
CalEEModConsumption (kwh/yr and kBTU/yr)
pasted from default output run

KBTU to KWhr
calculate Electricity Equivalent of this NG

	from caleemod						Conversions to remove NG consumption	
Land Use	**Electricity (kWh/yr)**	**CO2**	**CH4**	**N2O**	**Natural Gas (kBTU/yr)**	**KWh from NG consumption**	**Totak KWh for caleemod**	**Resultant NG for caleemod**
Convenience Market (24 hour)	461110.78056849	453.209	0.0330	0.0040	267786.2299416199	78483.65	539594.43530	0
Gasoline/Service Station	26711.68960161	453.209	0.0330	0.0040	92650.49850203999	27154.31	53865.99749	0
Fast Food Restaurant with Drive Thru	158420.19942612	453.209	0.0330	0.0040	449149.1029092000	0.00	158420.19943	449149.1029
Fast Food Restaurant w/o Drive Thru	72415.45097544	453.209	0.0330	0.0040	205310.5283304	0.00	72415.45098	205310.5283
City Park	0	453.209	0.0330	0.0040	0	0.00	0.00000	0
Parking Lot	290844.54432	453.209	0.0330	0.0040	0	0.00	290844.54432	0
Mobile Home Park	76011.70023	453.209	0.0330	0.0040	108137.6313999999	31693.33	107705.02714	0
User Defined Recreational	0	453.209	0.0330	0.0040	0	0.00	0.00000	0
							1222845.65464	654459.6312
							1222.84565	

kWh/kBTU 3.412
Source: EIA Energy conversion calculators
https://www.eia.gov/energyexplained/units-and-calculators/energy-conversion-calculators.php

ROG Off-Gassing Emissions (tons/year)

Spillage, Hose Permeation, Transfer Loss, Pressure Driven Loss	3		14,000,000	gallons/yr
Phase II Fueling - Non-ORVR Vehicles	0.76		38356.164	gallons/day
Phase II Fueling - ORVR Vehicles	0.11			
Total	**4**	tpy		
	21	lbs per avg day		

Emission Factors

Category		
Phase II Fueling - Non-ORVR Vehicles	0.42	lb ROG/kgal
Phase II Fueling - ORVR Vehicles	0.021	lb ROG/kgal
Phase II Fueling - Spillage	0.24	lb ROG/kgal
Gasoline Dispensing Hose Permeation	0.009	lb ROG/kgal
Phase I Bulk Transfer Losses	0.15	lb ROG/kgal
Pressure Driven Losses	0.024	lb ROG/kgal

Assumptions

14,000,000	gallons gasoline/year
74%	gasoline dispensed to ORVR vehicles (CARB 2013)
2000	lb/ton

Sources: CARB. 2013. *Revised Emissions Factors for Gasoline Marketing Operations at California Gasoline Dispensing Facilities*
CAPCOA. 2021. Gasoline Service Station Industrywide Risk Assessment Technical Guidance. Draft - September 2021.

https://ww3.arb.ca.gov/vapor/gdf-emisfactor/gdfumbrella.pdf
https://ww2.arb.ca.gov/sites/default/files/2021-10/Draft_2021_Gas_Station_IWG_Technical%20Guidance_PublicComment.pdf

Loves Travel Stop Construction v2 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Loves Travel Stop Construction v2
Construction Start Date	7/1/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.5
Precipitation (days)	22
Location	CA-36, Susanville, CA 96130, USA
County	Lassen
City	Unincorporated
Air District	Lassen County APCD
Air Basin	Northeast Plateau
TAZ	124
EDFZ	3
Electric Utility	Lassen Municipal Utility District
Gas Utility	Tuscarora
App Version	2022.1.1.33

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Convenience Market (24 hour)	7.9	1000sqft	0.18	7,943	0.00	—	—	—

Gasoline/Service Station	16	Pump	0.05	2,259	0.00	—	—	—
Fast Food Restaurant with Drive Thru	3.5	1000sqft	0.08	3,474	0.00	—	—	—
Fast Food Restaurant w/o Drive Thru	1.6	1000sqft	0.04	1,588	0.00	—	—	—
City Park	0.12	Acre	0.12	0.00	0.00	0.00	—	dog park
Parking Lot	131	Space	8.7	0.00	122,255	—	—	landscape
Mobile Home Park	10.0	Dwelling Unit	0.34	0.00	0.00	—	23	—
User Defined Recreational	118	User Defined Unit	2.7	0.00	0.00	—	—	bioretention basins
Road Construction	1.00	Mile	0.25	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	28	28	29	30	0.06	1.2	7.8	9.1	1.1	4.0	5.1	—	6,780	6,780	0.28	0.20	3.4	6,805
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.4	1.1	10	14	0.02	0.38	0.13	0.51	0.35	0.03	0.38	—	2,614	2,614	0.11	0.04	0.02	2,628

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.1	2.1	5.5	5.9	0.01	0.22	0.74	0.96	0.20	0.33	0.53	—	1,170	1,170	0.05	0.02	0.14	1,175
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.39	0.38	1.00	1.1	< 0.005	0.04	0.13	0.17	0.04	0.06	0.10	—	194	194	0.01	< 0.005	0.02	195

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.8	3.2	29	30	0.06	1.2	7.8	9.1	1.1	4.0	5.1	—	6,780	6,780	0.28	0.07	0.88	6,805
2027	28	28	18	25	0.05	0.65	0.53	1.2	0.60	0.13	0.73	—	5,296	5,296	0.18	0.20	3.4	5,364
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.4	1.1	10	14	0.02	0.38	0.13	0.51	0.35	0.03	0.38	—	2,614	2,614	0.11	0.04	0.02	2,628
2027	1.3	1.1	9.7	14	0.02	0.34	0.13	0.47	0.31	0.03	0.34	—	2,610	2,610	0.11	0.04	0.02	2,624
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.73	0.62	5.5	5.9	0.01	0.22	0.74	0.96	0.20	0.33	0.53	—	1,170	1,170	0.05	0.01	0.08	1,175
2027	2.1	2.1	2.9	3.9	0.01	0.10	0.06	0.15	0.09	0.01	0.11	—	784	784	0.03	0.02	0.14	790
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.13	0.11	1.00	1.1	< 0.005	0.04	0.13	0.17	0.04	0.06	0.10	—	194	194	0.01	< 0.005	0.01	195
2027	0.39	0.38	0.52	0.72	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	130	130	< 0.005	< 0.005	0.02	131

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.7	2.3	21	19	0.03	0.84	—	0.84	0.78	—	0.78	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.60	0.60	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.3	1.2	< 0.005	0.05	—	0.05	0.05	—	0.05	—	216	216	0.01	< 0.005	—	217
Demolition	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.24	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	36	36	< 0.005	< 0.005	—	36
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	0.87	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	136	136	0.01	0.01	0.49	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.01	0.47	0.05	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	233	233	< 0.005	0.04	0.39	244
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.2	8.2	< 0.005	< 0.005	0.01	8.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15	15	< 0.005	< 0.005	0.01	15
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.4	1.4	< 0.005	< 0.005	< 0.005	1.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.4	2.4	< 0.005	< 0.005	< 0.005	2.5

3.3. Site Preparation (2026) - Unmitigated

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

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

Off-Road Equipment	3.7	3.1	29	29	0.05	1.2	—	1.2	1.1	—	1.1	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	7.7	7.7	—	3.9	3.9	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.7	1.7	< 0.005	0.07	—	0.07	0.07	—	0.07	—	305	305	0.01	< 0.005	—	306
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.31	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	50	50	< 0.005	< 0.005	—	51
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.07	1.0	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	158	158	0.01	0.01	0.58	161
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.7	8.7	< 0.005	< 0.005	0.01	8.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.4	1.4	< 0.005	< 0.005	< 0.005	1.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.6	3.0	27	28	0.06	1.1	—	1.1	1.0	—	1.0	—	6,599	6,599	0.27	0.05	—	6,621

Dust From Material Movement	—	—	—	—	—	—	3.6	3.6	—	1.4	1.4	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.6	1.7	< 0.005	0.07	—	0.07	0.06	—	0.06	—	398	398	0.02	< 0.005	—	399
Dust From Material Movement	—	—	—	—	—	—	0.22	0.22	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.30	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	66	66	< 0.005	< 0.005	—	66
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.08	1.2	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	181	181	0.01	0.01	0.66	184

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10	10	< 0.005	< 0.005	0.02	11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.7	1.7	< 0.005	< 0.005	< 0.005	1.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.3	1.1	9.9	13	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.60	0.79	< 0.005	0.02	—	0.02	0.02	—	0.02	—	145	145	0.01	< 0.005	—	146
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24	24	< 0.005	< 0.005	—	24
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.72	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	107	107	0.01	< 0.005	0.01	109
Vendor	0.01	0.01	0.22	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	110	110	< 0.005	0.02	0.01	114
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.6	6.6	< 0.005	< 0.005	0.01	6.7
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.7	6.7	< 0.005	< 0.005	0.01	6.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.1	1.1	< 0.005	< 0.005	< 0.005	1.1
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.1	1.1	< 0.005	< 0.005	< 0.005	1.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.2	1.0	9.4	13	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.2	1.0	9.4	13	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.24	2.2	3.0	0.01	0.08	—	0.08	0.07	—	0.07	—	563	563	0.02	< 0.005	—	565
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.40	0.55	< 0.005	0.01	—	0.01	0.01	—	0.01	—	93	93	< 0.005	< 0.005	—	94

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.67	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	112	112	0.01	< 0.005	0.38	114
Vendor	0.01	0.01	0.19	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	107	107	< 0.005	0.02	0.24	112
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.66	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	105	105	0.01	< 0.005	0.01	107
Vendor	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	107	107	< 0.005	0.02	0.01	112
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.15	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	25	25	< 0.005	< 0.005	0.04	25
Vendor	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25	25	< 0.005	< 0.005	0.02	26
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.2	4.2	< 0.005	< 0.005	0.01	4.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.2	4.2	< 0.005	< 0.005	< 0.005	4.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2027) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.9	10.0	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.94	0.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.42	0.60	< 0.005	0.02	—	0.02	0.02	—	0.02	—	91	91	< 0.005	< 0.005	—	91
Paving	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15	15	< 0.005	< 0.005	—	15
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.80	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	133	133	0.01	0.01	0.45	135

Vendor	0.06	0.05	1.8	0.46	0.01	0.01	0.28	0.29	0.01	0.07	0.09	—	1,035	1,035	0.01	0.15	2.3	1,081
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.7	7.7	< 0.005	< 0.005	0.01	7.8
Vendor	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62	62	< 0.005	0.01	0.06	65
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.3	1.3	< 0.005	< 0.005	< 0.005	1.3
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10	10	< 0.005	< 0.005	0.01	11
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.1	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	28	28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.0	8.0	< 0.005	< 0.005	—	8.1
Architectural Coatings	1.7	1.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.3	1.3	< 0.005	< 0.005	—	1.3
Architectural Coatings	0.31	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	22	22	< 0.005	< 0.005	0.08	23
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.3	1.3	< 0.005	< 0.005	< 0.005	1.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Underground (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.7	2.5	< 0.005	0.05	—	0.05	0.04	—	0.04	—	387	387	0.02	< 0.005	—	388
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.20	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	46	46	< 0.005	< 0.005	—	46

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.5	7.5	< 0.005	< 0.005	—	7.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.28	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43	43	< 0.005	< 0.005	< 0.005	43
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	5.1	5.1	< 0.005	< 0.005	0.01	5.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.86
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	7/1/2026	7/31/2026	5.0	23	—
Site Preparation	Site Preparation	8/1/2026	8/31/2026	5.0	21	—
Grading	Grading	9/1/2026	9/30/2026	5.0	22	—
Building Construction	Building Construction	12/1/2026	4/30/2027	5.0	109	—
Paving	Paving	4/30/2027	5/31/2027	5.0	22	—
Architectural Coating	Architectural Coating	6/1/2027	6/30/2027	5.0	22	—
Underground	Trenching	10/1/2026	11/30/2026	5.0	43	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.0	33	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	2.0	8.0	367	0.40
Demolition	Excavators	Diesel	Average	3.0	8.0	36	0.38
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.0	8.0	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.0	8.0	84	0.37
Grading	Graders	Diesel	Average	1.00	8.0	148	0.41

Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.0	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.0	8.0	84	0.37
Grading	Excavators	Diesel	Average	2.0	8.0	36	0.38
Grading	Scrapers	Diesel	Average	2.0	8.0	423	0.48
Building Construction	Cranes	Diesel	Average	1.00	7.0	367	0.29
Building Construction	Forklifts	Diesel	Average	3.0	8.0	82	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.0	14	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.0	7.0	84	0.37
Building Construction	Welders	Diesel	Average	1.00	8.0	46	0.45
Paving	Pavers	Diesel	Average	2.0	8.0	81	0.42
Paving	Paving Equipment	Diesel	Average	2.0	8.0	89	0.36
Paving	Rollers	Diesel	Average	2.0	8.0	36	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.0	37	0.48
Underground	Excavators	Diesel	Average	1.00	8.0	36	0.38
Underground	Skid Steer Loaders	Diesel	Average	1.00	8.0	71	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	15	12	LDA,LDT1,LDT2
Demolition	Vendor	—	9.3	HHDT,MHDT
Demolition	Hauling	3.1	20	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	18	12	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.3	HHDT,MHDT
Site Preparation	Hauling	0.00	20	HHDT

Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	20	12	LDA,LDT1,LDT2
Grading	Vendor	—	9.3	HHDT,MHDT
Grading	Hauling	0.00	20	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	13	12	LDA,LDT1,LDT2
Building Construction	Vendor	3.6	9.3	HHDT,MHDT
Building Construction	Hauling	0.00	20	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15	12	LDA,LDT1,LDT2
Paving	Vendor	34	9.3	HHDT,MHDT
Paving	Hauling	0.00	20	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	2.5	12	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.3	HHDT,MHDT
Architectural Coating	Hauling	0.00	20	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Underground	Worker	5.0	12	LDA,LDT1,LDT2
Underground	Vendor	—	9.3	HHDT,MHDT
Underground	Hauling	0.00	20	HHDT
Underground	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	22,896	7,632	22,686

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	1,000	0.00
Site Preparation	0.00	0.00	32	0.00	0.00
Grading	0.00	—	22	0.00	0.00
Paving	0.00	0.00	0.00	0.00	7.9

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Convenience Market (24 hour)	0.00	0%
Paving	Gasoline/Service Station	0.00	0%
Paving	Fast Food Restaurant with Drive Thru	0.00	0%
Paving	Fast Food Restaurant w/o Drive Thru	0.00	0%
Paving	City Park	0.00	0%
Paving	Parking Lot	7.6	100%
Paving	Mobile Home Park	—	0%

Paving	User Defined Recreational	0.00	0%
Paving	Road Construction	0.25	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	453	0.03	< 0.005
2027	0.00	453	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	24	annual days of extreme heat
Extreme Precipitation	1.9	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	0	0	0	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	1	1	1	2
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	55
AQ-PM	2.5

AQ-DPM	57
Drinking Water	20
Lead Risk Housing	87
Pesticides	61
Toxic Releases	1.1
Traffic	38
Effect Indicators	—
CleanUp Sites	50
Groundwater	74
Haz Waste Facilities/Generators	43
Impaired Water Bodies	67
Solid Waste	53
Sensitive Population	—
Asthma	60
Cardio-vascular	19
Low Birth Weights	42
Socioeconomic Factor Indicators	—
Education	37
Housing	50
Linguistic	—
Poverty	83
Unemployment	89

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	28.96188887

Employed	18.74759399
Median HI	4.234569485
Education	—
Bachelor's or higher	34.23585269
High school enrollment	0.256640575
Preschool enrollment	65.96945977
Transportation	—
Auto Access	8.828435776
Active commuting	56.46092647
Social	—
2-parent households	7.943025792
Voting	48.14577185
Neighborhood	—
Alcohol availability	52.48299756
Park access	59.48928526
Retail density	40.87001155
Supermarket access	70.29385346
Tree canopy	92.24945464
Housing	—
Homeownership	24.61183113
Housing habitability	66.88053381
Low-inc homeowner severe housing cost burden	91.63351726
Low-inc renter severe housing cost burden	69.78057231
Uncrowded housing	65.16104196
Health Outcomes	—
Insured adults	55.46002823
Arthritis	0.0
Asthma ER Admissions	67.4

High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	27.3
Cognitively Disabled	1.0
Physically Disabled	4.3
Heart Attack ER Admissions	67.3
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	5.3
SLR Inundation Area	0.0
Children	68.4
Elderly	6.5
English Speaking	52.5
Foreign-born	7.5
Outdoor Workers	98.2

Climate Change Adaptive Capacity	—
Impervious Surface Cover	61.2
Traffic Density	51.2
Traffic Access	0.0
Other Indices	—
Hardship	68.9
Other Decision Support	—
2016 Voting	40.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	60
Healthy Places Index Score for Project Location (b)	9.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Overnight RV parking space modeled as mobile home park dwelling units, with reduced lot acreage measured from map provided by client. For construction, parking lot acreage 8.67 acre equals to total paved area (46,000 SF concrete + 245,000 SF onsite asphalt + 87,000 SF offsite asphalt). Note that the 87,000 SF offsite area will be removed for operation emission estimation. Assumes 1 mile of trenching for utilities. Trench is 2' wide assuming 12" pipe + 12" extra per pipe per engineering practices.
Construction: Construction Phases	Based on provided construction duration (months per phase). Assumed 40 days for undergrounding,
Construction: Off-Road Equipment	default equipment except skid steer and excavator assumed for trenching
Construction: Dust From Material Movement	No import/export due to excavation/grading per client's data. Assuming bioretention basin be graded three times, resulting in total 3x2.7=8.1 acres. Assumes trenching material is used to backfill.
Construction: Trips and VMT	Updated hauling trips for demolition phase. A total of 500 CY of debris will be hauled, per client's data. Updated vendor trips for paving phase. A total of 332,000 sqft (245,000 SF onsite + 87,000 SF offsite) will be paved asphalt, per client's data. Assumed applied thickness of 4 inches. Asphalt vendor trips is 26.6 per day. Concrete vendor trips is 7.8 per day (1,200 CY concrete per client's data). Assumed truck capacity is 14 CY per load.
Construction: Paving	Total asphalt paving area 7.62 acres = 332,000 SF = onsite 245,000 SF + offsite 87,000 SF, per client.

Loves Travel Stop Operation v2 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Loves Travel Stop Operation v2
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.5
Precipitation (days)	22
Location	CA-36, Susanville, CA 96130, USA
County	Lassen
City	Unincorporated
Air District	Lassen County APCD
Air Basin	Northeast Plateau
TAZ	124
EDFZ	3
Electric Utility	Lassen Municipal Utility District
Gas Utility	Tuscarora
App Version	2022.1.1.33

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Convenience Market (24 hour)	7.9	1000sqft	0.18	7,943	0.00	—	—	—

Gasoline/Service Station	16	Pump	0.05	2,259	0.00	—	—	—
Fast Food Restaurant with Drive Thru	3.5	1000sqft	0.08	3,474	0.00	—	—	—
Fast Food Restaurant w/o Drive Thru	1.6	1000sqft	0.04	1,588	0.00	—	—	—
City Park	0.12	Acre	0.12	0.00	0.00	0.00	—	dog park
Parking Lot	131	Space	7.6	0.00	122,255	—	—	—
Mobile Home Park	10.0	Dwelling Unit	0.34	0.00	0.00	—	23	—
User Defined Recreational	118	User Defined Unit	2.7	0.00	0.00	—	—	bioretention basins

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.2	0.94	0.31	3.7	0.01	0.34	0.00	0.34	0.33	0.00	0.33	113	1,862	1,974	6.2	0.03	1,655	3,794
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.0	0.78	0.30	2.4	0.01	0.34	0.00	0.34	0.33	0.00	0.33	113	1,857	1,970	6.2	0.03	1,655	3,789
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.73	0.66	0.21	1.3	< 0.005	0.09	0.00	0.09	0.09	0.00	0.09	71	1,770	1,840	6.0	0.03	1,655	3,654
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.13	0.12	0.04	0.23	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	12	293	305	1.0	< 0.005	274	605

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	1.2	0.93	0.14	3.5	0.01	0.33	—	0.33	0.32	—	0.32	54	120	174	0.26	< 0.005	—	181
Energy	0.02	0.01	0.18	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	1,728	1,728	0.13	0.01	—	1,735
Water	—	—	—	—	—	—	—	—	—	—	—	5.6	13	19	0.57	0.01	—	37
Waste	—	—	—	—	—	—	—	—	—	—	—	53	0.00	53	5.3	0.00	—	185
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,655	1,655
Total	1.2	0.94	0.31	3.7	0.01	0.34	0.00	0.34	0.33	0.00	0.33	113	1,862	1,974	6.2	0.03	1,655	3,794
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	1.0	0.77	0.13	2.3	0.01	0.33	—	0.33	0.32	—	0.32	54	116	170	0.26	< 0.005	—	177
Energy	0.02	0.01	0.18	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	1,728	1,728	0.13	0.01	—	1,735
Water	—	—	—	—	—	—	—	—	—	—	—	5.6	13	19	0.57	0.01	—	37
Waste	—	—	—	—	—	—	—	—	—	—	—	53	0.00	53	5.3	0.00	—	185
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,655	1,655
Total	1.0	0.78	0.30	2.4	0.01	0.34	0.00	0.34	0.33	0.00	0.33	113	1,857	1,970	6.2	0.03	1,655	3,789
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.71	0.65	0.03	1.1	< 0.005	0.07	—	0.07	0.07	—	0.07	12	28	40	0.06	< 0.005	—	42
Energy	0.02	0.01	0.18	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	1,728	1,728	0.13	0.01	—	1,735
Water	—	—	—	—	—	—	—	—	—	—	—	5.6	13	19	0.57	0.01	—	37
Waste	—	—	—	—	—	—	—	—	—	—	—	53	0.00	53	5.3	0.00	—	185
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,655	1,655
Total	0.73	0.66	0.21	1.3	< 0.005	0.09	0.00	0.09	0.09	0.00	0.09	71	1,770	1,840	6.0	0.03	1,655	3,654
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.13	0.12	0.01	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	2.0	4.7	6.7	0.01	< 0.005	—	6.9
Energy	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	286	286	0.02	< 0.005	—	287
Water	—	—	—	—	—	—	—	—	—	—	—	0.93	2.2	3.1	0.10	< 0.005	—	6.2
Waste	—	—	—	—	—	—	—	—	—	—	—	8.8	0.00	8.8	0.88	0.00	—	31
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	274	274
Total	0.13	0.12	0.04	0.23	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	12	293	305	1.0	< 0.005	274	605

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	670	670	0.05	0.01	—	673
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	67	67	< 0.005	< 0.005	—	67
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	197	197	0.01	< 0.005	—	198
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	90	90	0.01	< 0.005	—	90
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	361	361	0.03	< 0.005	—	363
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	134	134	0.01	< 0.005	—	134
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,518	1,518	0.11	0.01	—	1,525
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	670	670	0.05	0.01	—	673
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	67	67	< 0.005	< 0.005	—	67
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	197	197	0.01	< 0.005	—	198
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	90	90	0.01	< 0.005	—	90
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	361	361	0.03	< 0.005	—	363
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	134	134	0.01	< 0.005	—	134
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,518	1,518	0.11	0.01	—	1,525
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	111	111	0.01	< 0.005	—	111

Gasoline/Service	—	—	—	—	—	—	—	—	—	—	—	—	11	11	< 0.005	< 0.005	—	11
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	33	33	< 0.005	< 0.005	—	33
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	15	15	< 0.005	< 0.005	—	15
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	60	60	< 0.005	< 0.005	—	60
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	22	22	< 0.005	< 0.005	—	22
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	251	251	0.02	< 0.005	—	253

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market (24 hour)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Gasolin Station	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	0.01	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	144	144	0.01	< 0.005	—	144
Fast Food Restaurant w/o Drive Thru	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66	66	0.01	< 0.005	—	66
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Mobile Home Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.18	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	210	210	0.02	< 0.005	—	210
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market (24 hour)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Fast Food Restaurant with Drive Thru	0.01	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	144	144	0.01	< 0.005	—	144
Fast Food Restaurant w/o Drive Thru	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66	66	0.01	< 0.005	—	66
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Mobile Home Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.18	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	210	210	0.02	< 0.005	—	210
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market (24 hour)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24	24	< 0.005	< 0.005	—	24

Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11	11	< 0.005	< 0.005	—	11
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Mobile Home Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	35	35	< 0.005	< 0.005	—	35

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.51	0.25	0.13	2.3	0.01	0.33	—	0.33	0.32	—	0.32	54	116	170	0.26	< 0.005	—	177
Consumer Products	0.35	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.17	0.16	0.01	1.2	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.2	4.2	< 0.005	< 0.005	—	4.3
Total	1.2	0.93	0.14	3.5	0.01	0.33	—	0.33	0.32	—	0.32	54	120	174	0.26	< 0.005	—	181
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.51	0.25	0.13	2.3	0.01	0.33	—	0.33	0.32	—	0.32	54	116	170	0.26	< 0.005	—	177
Consumer Products	0.35	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1.0	0.77	0.13	2.3	0.01	0.33	—	0.33	0.32	—	0.32	54	116	170	0.26	< 0.005	—	177
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.02	0.01	0.01	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	2.0	4.3	6.3	0.01	< 0.005	—	6.6
Consumer Products	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	0.01	< 0.005	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.35	0.35	< 0.005	< 0.005	—	0.35
Total	0.13	0.12	0.01	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	2.0	4.7	6.7	0.01	< 0.005	—	6.9

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.3	2.4	3.7	0.13	< 0.005	—	7.8
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.45	0.87	1.3	0.05	< 0.005	—	2.8
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.2	4.3	6.6	0.23	0.01	—	14
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	1.0	2.0	3.0	0.11	< 0.005	—	6.4
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	2.6	2.6	< 0.005	< 0.005	—	2.6
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	0.62	1.2	1.8	0.06	< 0.005	—	3.9
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.6	13	19	0.57	0.01	—	37

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.3	2.4	3.7	0.13	< 0.005	—	7.8
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.45	0.87	1.3	0.05	< 0.005	—	2.8
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.2	4.3	6.6	0.23	0.01	—	14
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	1.0	2.0	3.0	0.11	< 0.005	—	6.4
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	2.6	2.6	< 0.005	< 0.005	—	2.6
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	0.62	1.2	1.8	0.06	< 0.005	—	3.9
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.6	13	19	0.57	0.01	—	37
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.21	0.40	0.61	0.02	< 0.005	—	1.3

Gasolin Station	—	—	—	—	—	—	—	—	—	—	—	0.07	0.14	0.22	0.01	< 0.005	—	0.47
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.37	0.72	1.1	0.04	< 0.005	—	2.3
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.17	0.33	0.50	0.02	< 0.005	—	1.1
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.44	0.44	< 0.005	< 0.005	—	0.44
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	0.10	0.20	0.30	0.01	< 0.005	—	0.64
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.93	2.2	3.1	0.10	< 0.005	—	6.2

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

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

Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13	0.00	13	1.3	0.00	—	45
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	4.6	0.00	4.6	0.46	0.00	—	16
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	22	0.00	22	2.2	0.00	—	75
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	9.9	0.00	9.9	0.99	0.00	—	34
City Park	—	—	—	—	—	—	—	—	—	—	—	0.01	0.00	0.01	< 0.005	0.00	—	0.02
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	4.0	0.00	4.0	0.39	0.00	—	14
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	53	0.00	53	5.3	0.00	—	185
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13	0.00	13	1.3	0.00	—	45

Gasoline Station	—	—	—	—	—	—	—	—	—	—	—	4.6	0.00	4.6	0.46	0.00	—	16
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	22	0.00	22	2.2	0.00	—	75
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	9.9	0.00	9.9	0.99	0.00	—	34
City Park	—	—	—	—	—	—	—	—	—	—	—	0.01	0.00	0.01	< 0.005	0.00	—	0.02
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	4.0	0.00	4.0	0.39	0.00	—	14
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	53	0.00	53	5.3	0.00	—	185
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	2.1	0.00	2.1	0.21	0.00	—	7.5
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.77	0.00	0.77	0.08	0.00	—	2.7

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	3.6	0.00	3.6	0.36	0.00	—	12
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	1.6	0.00	1.6	0.16	0.00	—	5.7
City Park	—	—	—	—	—	—	—	—	—	—	—	< 0.005	0.00	< 0.005	< 0.005	0.00	—	< 0.005
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	0.65	0.00	0.65	0.07	0.00	—	2.3
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8.8	0.00	8.8	0.88	0.00	—	31

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,647	1,647

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.4	5.4
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.5	2.5
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,655	1,655
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,647	1,647
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.4	5.4
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.5	2.5
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00

Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,655	1,655
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	273	273
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.90	0.90
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.41	0.41
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	274	274

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Convenience Market (24 hour)	Wood Fireplaces	0	0
Convenience Market (24 hour)	Gas Fireplaces	0	0
Convenience Market (24 hour)	Propane Fireplaces	0	0
Convenience Market (24 hour)	Electric Fireplaces	0	0
Convenience Market (24 hour)	No Fireplaces	0	0
Convenience Market (24 hour)	Conventional Wood Stoves	0	0
Convenience Market (24 hour)	Catalytic Wood Stoves	0	0
Convenience Market (24 hour)	Non-Catalytic Wood Stoves	0	0
Convenience Market (24 hour)	Pellet Wood Stoves	0	0
Gasoline/Service Station	Wood Fireplaces	0	0
Gasoline/Service Station	Gas Fireplaces	0	0
Gasoline/Service Station	Propane Fireplaces	0	0
Gasoline/Service Station	Electric Fireplaces	0	0
Gasoline/Service Station	No Fireplaces	0	0
Gasoline/Service Station	Conventional Wood Stoves	0	0
Gasoline/Service Station	Catalytic Wood Stoves	0	0
Gasoline/Service Station	Non-Catalytic Wood Stoves	0	0
Gasoline/Service Station	Pellet Wood Stoves	0	0
Fast Food Restaurant with Drive Thru	Wood Fireplaces	0	0
Fast Food Restaurant with Drive Thru	Gas Fireplaces	0	0
Fast Food Restaurant with Drive Thru	Propane Fireplaces	0	0
Fast Food Restaurant with Drive Thru	Electric Fireplaces	0	0
Fast Food Restaurant with Drive Thru	No Fireplaces	0	0
Fast Food Restaurant with Drive Thru	Conventional Wood Stoves	0	0

Fast Food Restaurant with Drive Thru	Catalytic Wood Stoves	0	0
Fast Food Restaurant with Drive Thru	Non-Catalytic Wood Stoves	0	0
Fast Food Restaurant with Drive Thru	Pellet Wood Stoves	0	0
Fast Food Restaurant w/o Drive Thru	Wood Fireplaces	0	0
Fast Food Restaurant w/o Drive Thru	Gas Fireplaces	0	0
Fast Food Restaurant w/o Drive Thru	Propane Fireplaces	0	0
Fast Food Restaurant w/o Drive Thru	Electric Fireplaces	0	0
Fast Food Restaurant w/o Drive Thru	No Fireplaces	0	0
Fast Food Restaurant w/o Drive Thru	Conventional Wood Stoves	0	0
Fast Food Restaurant w/o Drive Thru	Catalytic Wood Stoves	0	0
Fast Food Restaurant w/o Drive Thru	Non-Catalytic Wood Stoves	0	0
Fast Food Restaurant w/o Drive Thru	Pellet Wood Stoves	0	0
City Park	Wood Fireplaces	0	0
City Park	Gas Fireplaces	0	0
City Park	Propane Fireplaces	0	0
City Park	Electric Fireplaces	0	0
City Park	No Fireplaces	0	0
City Park	Conventional Wood Stoves	0	0
City Park	Catalytic Wood Stoves	0	0
City Park	Non-Catalytic Wood Stoves	0	0
City Park	Pellet Wood Stoves	0	0
Parking Lot	Wood Fireplaces	0	0
Parking Lot	Gas Fireplaces	0	0
Parking Lot	Propane Fireplaces	0	0
Parking Lot	Electric Fireplaces	0	0
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0
Parking Lot	Catalytic Wood Stoves	0	0

Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	Pellet Wood Stoves	0	0
Mobile Home Park	Wood Fireplaces	0	0
Mobile Home Park	Gas Fireplaces	6	6
Mobile Home Park	Propane Fireplaces	0	0
Mobile Home Park	Electric Fireplaces	0	0
Mobile Home Park	No Fireplaces	1	1
Mobile Home Park	Conventional Wood Stoves	0	0
Mobile Home Park	Catalytic Wood Stoves	1	1
Mobile Home Park	Non-Catalytic Wood Stoves	1	1
Mobile Home Park	Pellet Wood Stoves	0	0
User Defined Recreational	Wood Fireplaces	0	0
User Defined Recreational	Gas Fireplaces	0	0
User Defined Recreational	Propane Fireplaces	0	0
User Defined Recreational	Electric Fireplaces	0	0
User Defined Recreational	No Fireplaces	0	0
User Defined Recreational	Conventional Wood Stoves	0	0
User Defined Recreational	Catalytic Wood Stoves	0	0
User Defined Recreational	Non-Catalytic Wood Stoves	0	0
User Defined Recreational	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

—	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
undefined	0.00	0.00	22,896	7,632	19,921

5.10.3. Landscape Equipment

Season	Unit	Value

Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Convenience Market (24 hour)	539,594	453	0.0330	0.0040	0.00
Gasoline/Service Station	53,866	453	0.0330	0.0040	0.00
Fast Food Restaurant with Drive Thru	158,420	453	0.0330	0.0040	449,149
Fast Food Restaurant w/o Drive Thru	72,415	453	0.0330	0.0040	205,311
City Park	0.00	453	0.0330	0.0040	0.00
Parking Lot	290,845	453	0.0330	0.0040	0.00
Mobile Home Park	107,705	453	0.0330	0.0040	0.00
User Defined Recreational	0.00	453	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Convenience Market (24 hour)	653,500	0.00
Gasoline/Service Station	236,039	0.00
Fast Food Restaurant with Drive Thru	1,171,226	0.00
Fast Food Restaurant w/o Drive Thru	535,379	0.00
City Park	0.00	0.00
Parking Lot	0.00	1,459,363

Mobile Home Park	324,492	0.00
User Defined Recreational	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Convenience Market (24 hour)	24	0.00
Gasoline/Service Station	8.6	0.00
Fast Food Restaurant with Drive Thru	40	0.00
Fast Food Restaurant w/o Drive Thru	18	0.00
City Park	0.01	0.00
Parking Lot	0.00	0.00
Mobile Home Park	7.3	0.00
User Defined Recreational	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Convenience Market (24 hour)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.0	4.0	18
Convenience Market (24 hour)	Supermarket refrigeration and condensing units	R-404A	3,922	27	17	17	18
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.8	4.0	4.0	18

Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.5	7.5	20
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.8	4.0	4.0	18
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.5	7.5	20
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.0	4.0	18
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Mobile Home Park	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.5	2.5	10.0
Mobile Home Park	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	24	annual days of extreme heat
Extreme Precipitation	1.9	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	0	0	0	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	1	1	1	2
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	55
AQ-PM	2.5
AQ-DPM	57
Drinking Water	20
Lead Risk Housing	87
Pesticides	61
Toxic Releases	1.1
Traffic	38
Effect Indicators	—
CleanUp Sites	50
Groundwater	74
Haz Waste Facilities/Generators	43
Impaired Water Bodies	67
Solid Waste	53

Sensitive Population	—
Asthma	60
Cardio-vascular	19
Low Birth Weights	42
Socioeconomic Factor Indicators	—
Education	37
Housing	50
Linguistic	—
Poverty	83
Unemployment	89

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	28.96188887
Employed	18.74759399
Median HI	4.234569485
Education	—
Bachelor's or higher	34.23585269
High school enrollment	0.256640575
Preschool enrollment	65.96945977
Transportation	—
Auto Access	8.828435776
Active commuting	56.46092647
Social	—
2-parent households	7.943025792
Voting	48.14577185

Neighborhood	—
Alcohol availability	52.48299756
Park access	59.48928526
Retail density	40.87001155
Supermarket access	70.29385346
Tree canopy	92.24945464
Housing	—
Homeownership	24.61183113
Housing habitability	66.88053381
Low-inc homeowner severe housing cost burden	91.63351726
Low-inc renter severe housing cost burden	69.78057231
Uncrowded housing	65.16104196
Health Outcomes	—
Insured adults	55.46002823
Arthritis	0.0
Asthma ER Admissions	67.4
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	27.3
Cognitively Disabled	1.0
Physically Disabled	4.3
Heart Attack ER Admissions	67.3
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0

Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	5.3
SLR Inundation Area	0.0
Children	68.4
Elderly	6.5
English Speaking	52.5
Foreign-born	7.5
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	61.2
Traffic Density	51.2
Traffic Access	0.0
Other Indices	—
Hardship	68.9
Other Decision Support	—
2016 Voting	40.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	60

Healthy Places Index Score for Project Location (b)	9.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Overnight RV parking space modeled as mobile home park dwelling units, with reduced lot acreage measured from map provided by client.
Construction: Construction Phases	Based on provided construction duration (months per phase).
Construction: Paving	Total asphalt paving area 7.62 acres = 332,000 SF = onsite 245,000 SF + offsite 87,000 SF, per client.
Operations: Vehicle Data	Zeroed out Res trip lengths for Mobile Home Park because land use purpose is non-residential (overnight RV parking).
Operations: Hearths	Zeroed out for overnight RV parking.
Operations: Energy Use	changes to default consumption based on fact that all non-kitchen uses would be electric. NG kBTU to kwh assuming 3.412 kBTU per kwh. All assigned to T24 for simplicity. Fast food remains default.
Operations: Water and Waste Water	scaled to match provided water demand: 12,000 gallons per day (4,380,000 gallons per year)

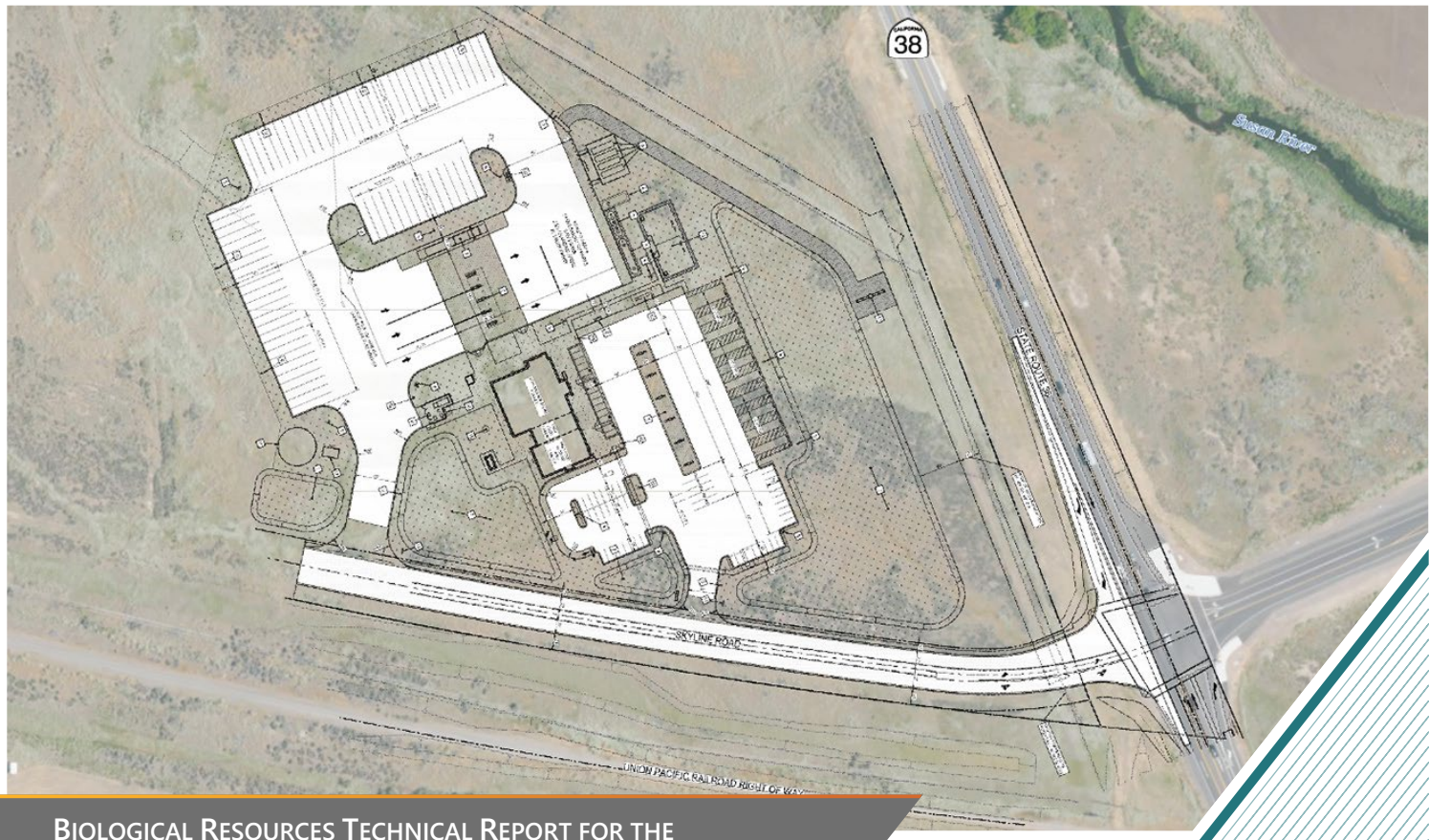
2022 CARB & CAPCOA Gasoline Service Station Industrywide Risk Assessment Look-up Tool
Version 1.0 - February 18, 2022

Required Value	User Defined Input	Instructions
Annual Throughput (gallons/year)	2,800,000	Enter your gas station's annual throughput in gallons of gasoline dispensed per year.
Hourly Dispensing Throughput (gallons/hour)	700	The tool will calculate the maximum hourly vehicle fueling throughput based on annual throughput as defined by Table 10 of the 2020 Gasoline Service Station Industrywide Risk Assessment Technical Guidance Document (Technical Guidance). If a different value is desired please enter it into cell L4.
Hourly Loading Throughput (gallons/hour)	8800	The tool will calculate the maximum hourly loading throughput based on annual throughput as defined by Table 10 of the Technical Guidance. If a different value is desired please enter it into cell L5.
Meteorological Data	Redding	Select appropriate meteorological data. Met sets provided include 2 rural (Redding and Lancaster) and 4 urban (Fresno, Ontario, San Diego, and San Jose) locations. Use whichever best correlates to your location. If you would like to use site-specific meteorological data please refer to the Variable Met Tool.
Distance to Nearest Resident (meters)	244	Enter the distance to the nearest residential receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Nearest Business (meters)	1000	Enter the distance to the nearest worker receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Acute Receptor (meters)	100	Enter the distance where acute impacts are expected in meters as measured from the edge of the station canopy. This can be the distance to the property boundary, nearest resident, nearest worker, or any other user defined location. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Control Scenario	EVR Phase I & EVR Phase II	Select the appropriate control scenario for your gas station. Please refer to technical Guidance for an explanation of the different control scenarios. Almost all gas stations in California are equipped with EVR Phase I and EVR Phase II controls.
Include Building Downwash Adjustments	no	Building downwash may over estimate risk results. High results should be investigated further through site-specific health risk assessment.

Risk Value	Results
Max Residential Cancer Risk (chances/million)	0.38
Max Worker Cancer Risk (chances/million)	0.00
Chronic HI	0.00
Acute HI	0.16

Appendix D

Biological Resources Technical Report



BIOLOGICAL RESOURCES TECHNICAL REPORT FOR THE

Susanville Travel Stop Project

Prepared for:

City of Susanville

October 2025

BIOLOGICAL RESOURCES TECHNICAL REPORT FOR THE

Susanville Travel Stop Project

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October 2025

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LIST OF ABBREVIATIONS

APN	Assessor's Parcel Number
applicant	Lane Engineers, Inc
Cal-IPC	California Invasive Plant Council
CARI	California Aquatic Resource Inventory
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
CWHR	California Wildlife Habitat Relationship
ESA	federal Endangered Species Act
MBTA	Migratory Bird Treaty Act
NPPA	California Native Plant Protection Act
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
project site	14.15 acres of vacant land to the southeast of the City of Susanville
project	construct for operation a full-service travel stop
RV	recreational vehicle
RWQCB	regional water quality control boards
SR	State Route
State Procedures	*State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*
study area	project site is part of a larger 79.6-acre parcel
SWRCB	State Water Resources Control Board
USACE	US Army Corps of Engineers
USDA	US Department of Agriculture
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey

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1 INTRODUCTION

This report documents the methods and results of a biological resources constraints analysis conducted for the Susanville Travel Stop Project (project) in Susanville, California. The purpose of this report is to describe the existing biological resources within and adjacent to the project site, evaluate the potential for occurrence of sensitive biological resources, assess the potential impacts to these biological resources associated with the project, and recommend mitigation for impacts that may be considered significant as required under the California Environmental Quality Act (CEQA).

1.1 PROJECT DESCRIPTION AND PROJECT LOCATION

The Project applicant is proposing to construct for operation a full-service travel stop (project) on approximately 14.15 acres of vacant land to the southeast of the City of Susanville (project site). The project site is in an unincorporated area of Lassen County that is proposed for annexation into the City of Susanville in the City of Susanville General Plan. The project site is part of a larger 79.6-acre parcel (study area) (Assessor's Parcel Number [APN] 107-280-017), located immediately south of Susanville city limits and west of State Route (SR) 36, although the remainder of the parcel would remain undeveloped. Existing and future truck and vehicular traffic is expected to generate substantial demand for the proposed travel stop facilities and services as the City lies at the junction of SR 36 and SR 139. SR 36 is an east-west highway that begins at US Highway 101 near the California Coast. Near Susanville, the roadway serves as an important link between Redding and Red Bluff (via SR 36 and SR 44) to the west, and Reno/North Lake Tahoe (via US Highway 395) to the south; and SR 139 heads north to the Oregon border as a direct route to Klamath Falls.

The City of Susanville is located on the Susan River in the southern part of Lassen County, California at the head of Honey Lake Valley. The City is located approximately 4.5 miles northwest of the unincorporated community of Johnstonville and 82 miles northwest of Reno.

The proposed project includes a travel stop, which would provide professional truck drivers and motorists with 24-hour access to purchase gasoline, diesel, propane, electronics, snacks, travel items, and food from two fast-food restaurants, one with a drive through. A dog park, recreational vehicle (RV) dump station, bioretention basins, truck, RV and automobile parking areas and landscaping/lighting are also proposed, along with a 10-space overnight RV park. Project visitors/customers would include "over-the-road" trucks (i.e., professional long-haul drivers who are on the road for consecutive days or weeks at a time), traveling motorists, and residents. Primary access to the project site would be provided from SR 36 via an existing signalized intersection at SR 36 and Skyline Road but with a new dedicated exit lane southbound and a new northbound dedicated turn lane onto Skyline Road. Ingress/egress would be provided via two entry/exit points off Skyline Road, the first for RVs and automobiles and the second for trucks.

The proposed project would install storm drains and proposed project grading would also implement stormwater control/drainage and water quality features to prevent drainage and water quality impacts, which would include bioretention ponds and standard best management practices.

The project would include a variety of off-site improvements, including highway and street improvements and transitions, drainage facility connections, utility connections, and landscaping. The City of Susanville currently provides water and natural gas services to the city, the Susanville Sanitation District serves the city sewer, and electricity is provided by Lassen Municipal Utility District. Existing overhead electrical lines are located along Skyline Road and adjacent to SR 36 and would be relocated prior to construction and the project site would tie-in to these. Other utilities would generally be brought to the site via a trench within the outer limits of the City/Caltrans right-of-way. Utilities such as water and gas would be brought to the site from Johnstonville Road via Skyline Road, on the west side of the road. The gas and water lines would be trenched either side of the Susan River but would be pumped through pipes that would be hung from the side of the bridge on Skyline Road over the Susan River.

The sewer line route would connect from the site at a point approximately 600 ft north from the SR 36/Riverside Drive intersection and would be bored under the Caltrans right-of-way from the west side of SR 36 to the east side of SR 36.

The sewer would then be trenched either side of the Susan River but, with Caltrans permission and an encroachment permit in accordance with Caltrans standards, would be pumped through a pipe that would be hung from the eastern (downstream) side of the SR 36 bridge over the Susan River (Bridge 7-33), before tying in to the existing sanitary sewer manhole at the SR 36/Riverside Drive intersection.

1.2 DATA REVIEW AND SURVEY METHODS

The information and analysis presented in this report is focused on special-status species, wildlife habitats, vegetation communities, and potentially jurisdictional waters of the United States and waters of the state that occur or have the potential to occur within or adjacent to the project site or be affected by project activities. The results of the assessment are based on literature review and database queries as well as a reconnaissance-level survey conducted on the project site.

Data reviewed in preparation of this analysis include:

- California Natural Diversity Database (CNDDB) records search of the Diamond Mountain, Fredonyer Pass, Gallatin Peak, Janesville, Johnstonville, Pikes Point, Roop Mountain, Susanville, and Tunnison Mountain US Geological Survey (USGS) 7.5-minute quadrangles (CNDDB 2024).
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants records search of the Diamond Mountain, Fredonyer Pass, Gallatin Peak, Janesville, Johnstonville, Pikes Point, Roop Mountain, Susanville, and Tunnison Mountain USGS 7.5-minute quadrangles (CNPS 2024).
- US Fish and Wildlife Service (USFWS) Information for Planning and Consultation list of species that may be affected by activities implemented at the project location (USFWS 2024a).
- USFWS National Wetlands Inventory mapping (USFWS 2024b).
- US Department of Agriculture (USDA) Web Soil Survey (USDA 2024).
- Aerial photographs of the project site and vicinity.

A reconnaissance-level survey for biological resources was conducted by Ascent biologists, Greg Anthenien and Sara Violett, on June 27, 2024. During the survey, the biologists mapped habitat types in the study area as well as verified the suitability of habitats in the study area for special-status wildlife and plant species. The study area for the biological reconnaissance survey consisted of the entire 79.6-acre parcel (APN 107-280-017) that the 14.15-acre project site is within (Figure 1). Representative photos of the study area were taken and are presented in Appendix A of this report.

The following year on April 7 and 8, 2025, an aquatic resources delineation was conducted by Ascent wetland ecologists Tammie Beyerl and Shannon Hickey following the *Wetlands Delineation Manual* (Environmental Laboratory 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Environmental Laboratory 2010), as well as the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB 2019). The study area for the delineation consisted of the project site and potential off-site improvement areas as well as a buffer of 100 feet (Figure 2). Areas showing evidence of wetland and/or drainage signatures were investigated within the study area to determine the location and boundaries of wetlands and waters that may be subject to state or federal jurisdiction. The complete methodology and results of the delineation are provided in a separate report.

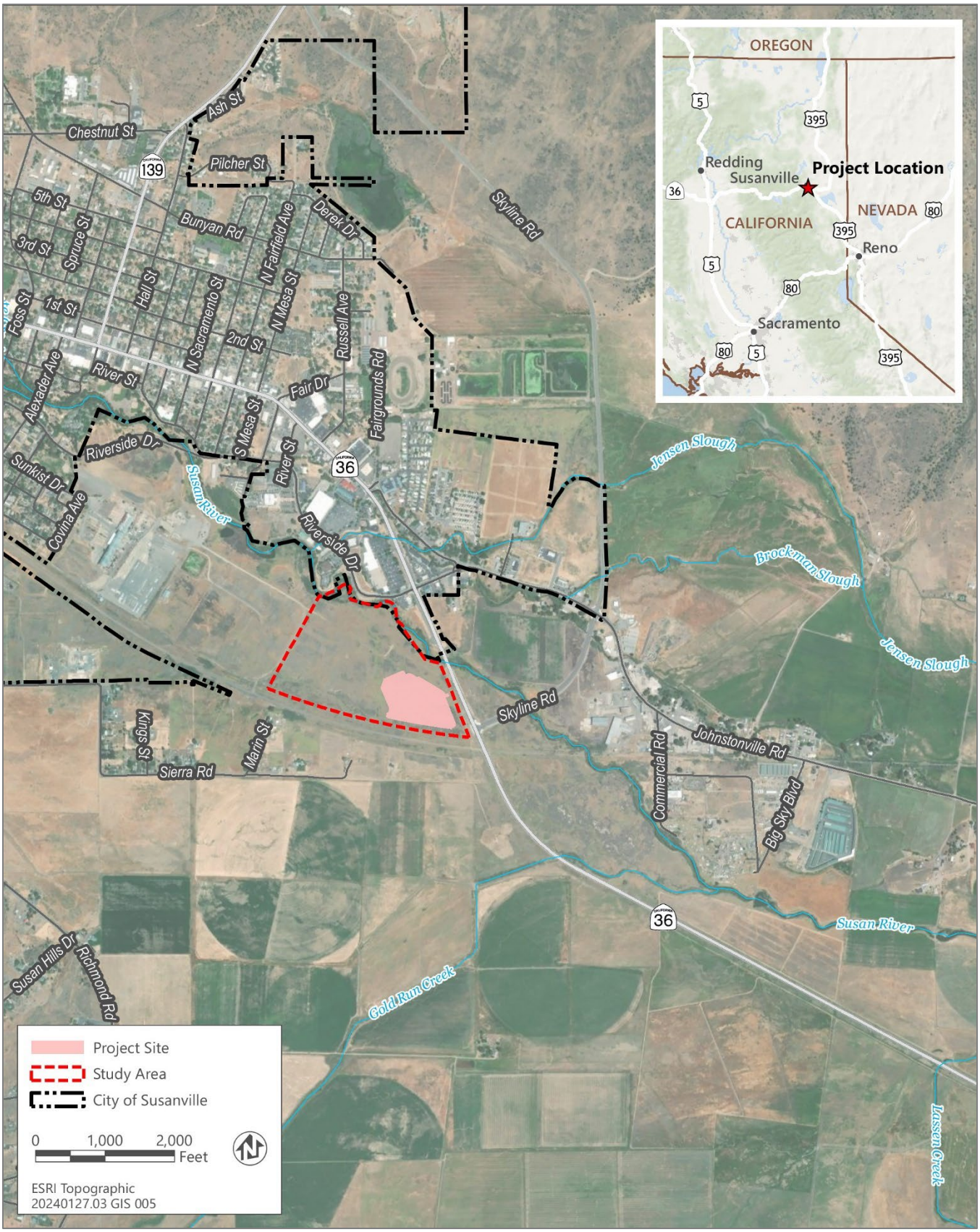
On June 16 and 17, 2025, Ascent botanist Karileigh Williams conducted a botanical survey for special-status plants. The survey was conducted in accordance with the protocols described in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018). The botanical survey area is the same as the delineation study area and encompasses the entire project footprint and potential off-site improvement areas as well as a buffer of 100 feet (Figure 2). As of June 2025, average precipitation in the area was 81 percent of normal for the water year (DWR 2025). The survey coincided with blooming periods for all potentially occurring special-status plant species, except for sticky pyrrocoma (*Pyrrocoma lucida*), which has a blooming period from July through October.

However, this species can be identified by a combination of other distinguishing characteristics, such as the leaves and buds. During the special-status plant survey, the botanist walked meandering transects throughout the study area. All habitats present were surveyed thoroughly to properly inventory and document any potential occurrences of special-status plants. The surveys were floristic in nature, meaning that all vascular plant species encountered that were in identifiable condition were identified to the taxonomic level necessary to determine rarity status. Plants were keyed using *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin 2012). A comprehensive plant species list is provided in Appendix B of this report.

Based on data review, bank swallows (*Riparia riparia*) have previously nested on the banks of the Susan River in the project vicinity and tricolored blackbirds (*Ageleaius tricolor*) have potential to nest in riparian habitat near the project site. Bank swallows and tricolored blackbirds nest in colonies on river and stream banks and recent observations of these species have been recorded near the project site (CNDDB 2025; eBird 2025). Swainson's hawks (*Buteo swainsoni*) may nest in large trees near the project site and many observations of Swainson's hawk have been recorded on eBird in Susanville and surrounding areas. Bank swallow, tricolored blackbird, and Swainson's hawk are listed as threatened species under the California Endangered Species Act (CESA) and noise, vibration, and visual stimuli created by project activities and operation in the vicinity of nest sites could cause nest abandonment, which would require a CESA Section 2081 take permit from the California Department of Fish and Wildlife (CDFW). The applicant requested that Ascent biologists conduct breeding season surveys in 2025 to examine bank swallow, tricolored blackbird, and Swainson's hawk use of the area including and surrounding the project site and potential off-site utility and roadway improvement areas. The complete methods and results of the bird surveys are provided in Appendix C.

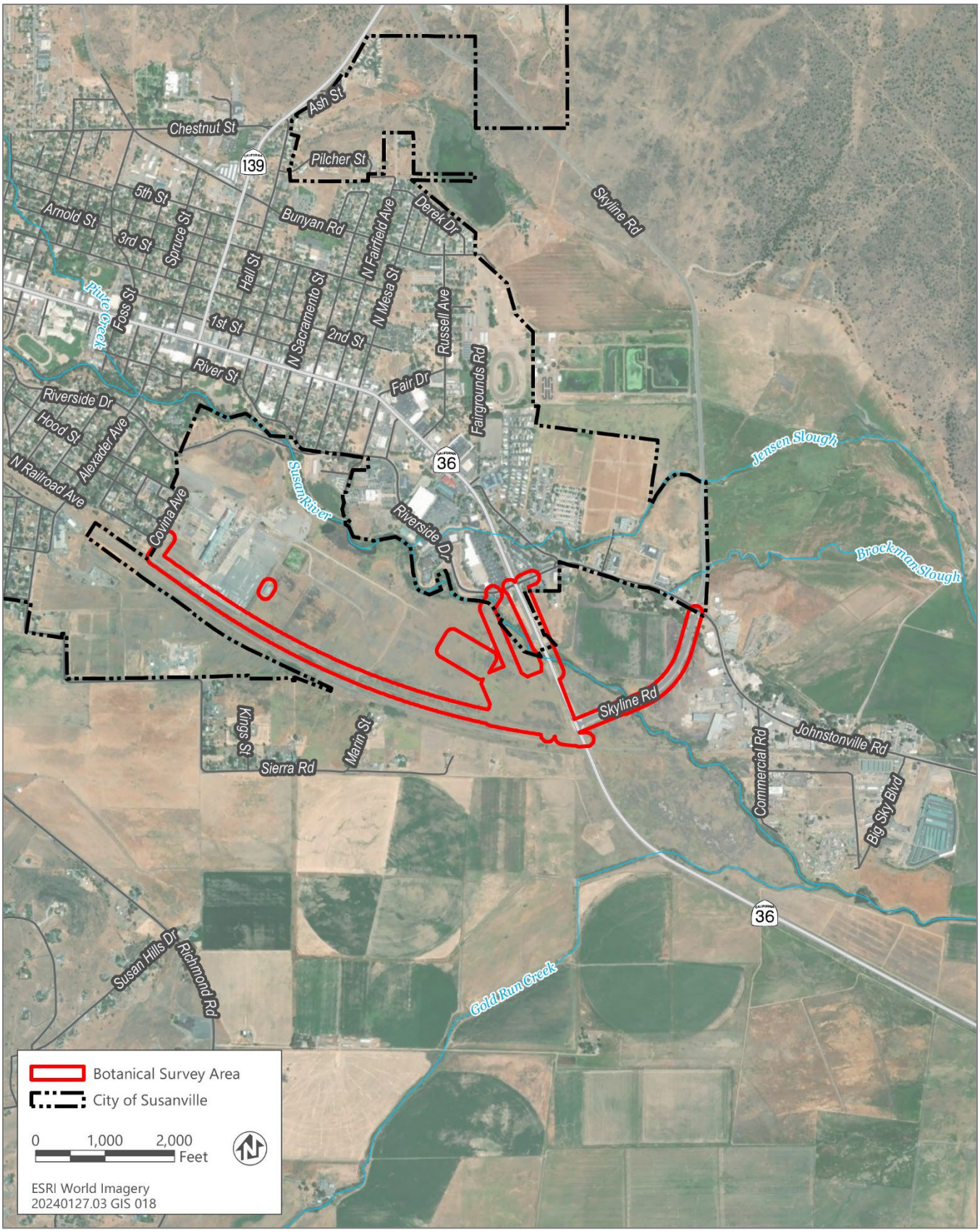
Ascent wildlife biologists Carlos Alvarado and Nick Kryshak conducted three focused surveys in 2025 for tricolored blackbirds, bank swallows, and Swainson's hawks at and surrounding the project site on April 21-22, May 11-12, and June 2-3, 2025. The survey buffers included areas within 1.5 miles of the project site and off-site improvement areas for tricolored blackbirds, areas within 500 feet for bank swallows, and those within 0.5 miles for Swainson's hawk (study area) (Figure 3). Surveyors used binoculars and a spotting scope to scan the area and listened for bird vocalizations. Potential foraging and nesting areas were determined prior to field surveys using aerial imagery, and occurrence data from eBird, iNaturalist (a citizen scientist database), and the California Natural Diversity Database (CNDDB) (eBird 2025; iNaturalist 2025; CNDDB 2025). Due to constraints in accessing private property, the surveys focused on potentially suitable habitat at the project site and several additional locations where target species had been previously reported but used binoculars and the spotting scope to assess and survey inaccessible areas for target species.

Tricolored blackbird surveys were conducted in accordance with the methods described in *Tricolored Blackbird Survey Methods* (Airola et al 2024). Surveys for bank swallows were conducted following the methods described in *The California Department of Fish and Wildlife Statewide Bank Swallow Colony Inventory Survey Methods* (McFarland and Kozlowski 2021). Swainson's hawk surveys followed the guidelines provided by the Swainson's Hawk Technical Advisory Committee (TAC) 2000 within *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys for the California Central Valley*. Bank swallow and Swainson's hawk surveys were conducted concurrently with the tricolored blackbird surveys. When proximate to the study area or site visit travel routes, known locations of the target species were visited as reference sites to inform species identification and seasonal behavior.



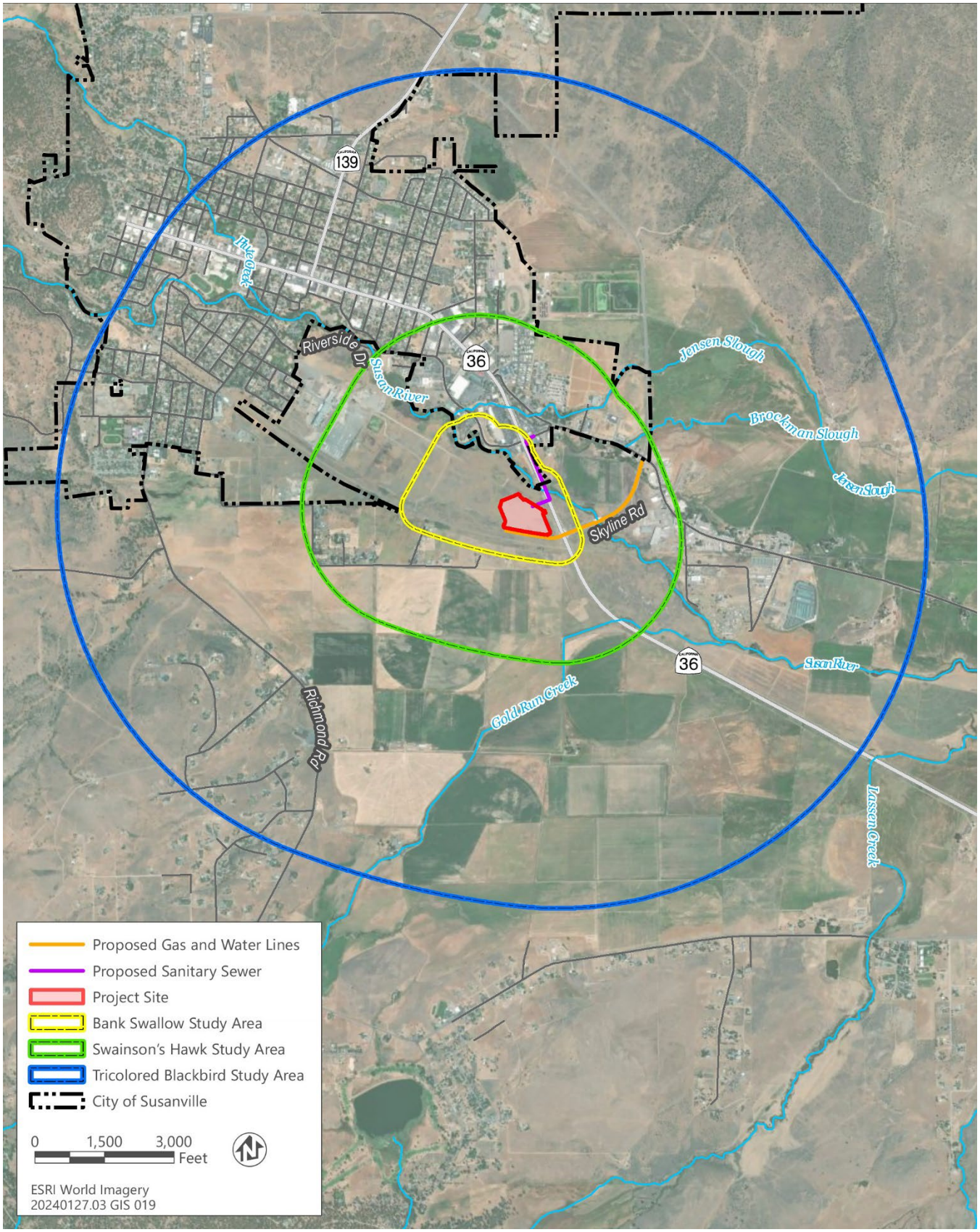
Source: Adapted by Ascent in 2024.

Figure 1 Reconnaissance Study Area, Project Site and Vicinity



Source: Adapted by Ascent in 2024.

Figure 2 Aquatic Resources Delineation and Botanical Survey Area



Source: Adapted by Ascent in 2025.

Figure 3 Nesting Birds Survey Area

2 REGULATORY SETTING

2.1 FEDERAL ENDANGERED SPECIES ACT

Pursuant to the federal Endangered Species Act (ESA; 16 U.S.C. Section 1531 et seq.), USFWS regulates the taking of species listed in ESA as threatened or endangered. In general, persons subject to ESA (including private parties) are prohibited from "taking" endangered or threatened fish and wildlife species on private or government-owned property, and from "taking" endangered or threatened plants in areas under federal jurisdiction or in violation of state law. Under Section 9 of the ESA, the definition of "take" is to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." USFWS has also interpreted the definition of "harm" to include significant habitat modification that could result in take.

Section 10 of ESA applies if a non-federal agency is the lead agency for an action that results in take and no other federal agencies are involved in permitting the action. Section 7 of ESA applies if a federal discretionary action is required (e.g., a federal agency must issue a permit), in which case the involved federal agency consults with USFWS.

2.2 CALIFORNIA ENDANGERED SPECIES ACT

The California Endangered Species Act (CESA) prohibits the take of any species that the California Fish and Game Commission has determined to be endangered or threatened, except as allowed by the California Native Plant Protection Act or the California Desert Native Plants Act. Fish and Game Code section 2081, however, authorizes the "incidental take" of such species under certain conditions and subject to certain mitigation requirements. Under the Fish and Game Code, which includes CESA, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California Department of Fish and Wildlife (CDFW) understands this definition to include any activity that would directly or indirectly kill an individual of a species. Notably, the concept of "take" under CESA does not include "harm" or "harass," as the ESA definition does. As a result, the threshold for take is greater under CESA than under ESA.

2.3 CLEAN WATER ACT

2.3.1 Section 404

Section 404 of the Clean Water Act (CWA) prohibits the discharge of dredged or fill material into waters of the United States, including wetlands, except as permitted under separate regulations by the US Army Corps of Engineers (USACE) and US Environmental Protection Agency. Fill material is material placed in waters of the United States that has the effect of replacing any portion of waters of the United States with dry land or changing the bottom elevation of any portion of waters of the United States. To discharge dredged or fill material into waters of the United States, including wetlands, Section 404 requires projects to receive authorization from the Secretary of the Army, acting through USACE. According to the United States Supreme Court, waters of the United States are "those relatively permanent, standing or continuously flowing bodies of water forming geographical features that are described in ordinary parlance as 'streams, oceans, rivers, and lakes.'" Wetlands adjacent to such waters come within the term where "the wetland has a continuous surface connection with that water, making it difficult to determine where the 'water' ends and the 'wetland' begins." (*Sackett v. Environmental Protection Agency*, 598 U.S. 651 (2023).)

2.3.2 Section 401

Under Section 401 of the CWA, an activity requiring a CWA Section 404 permit must obtain a state water quality certification to ensure state water quality standards are not violated. In California, the authority to grant water quality certification is delegated by the State Water Resources Control Board (SWRCB) to the nine regional water quality control boards (RWQCBs). The applicable RWQCB for the project is the Lahontan RWQCB. In accordance with Section 401 of the CWA, projects that apply for a USACE permit for discharge of dredged or fill material must obtain water quality certification from the appropriate RWQCB indicating that the action would uphold state water quality standards.

2.4 PORTER-COLOGNE WATER QUALITY CONTROL ACT

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) requires that each of the nine RWQCBs in California prepare and periodically update basin plans for water quality control. Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Basin plans offer an opportunity to protect wetlands through the establishment of water quality objectives. The RWQCB's jurisdiction includes waters of the United States, as well as areas that meet the definition of "waters of the state." "Waters of the state" is defined as any surface water or groundwater, including saline waters, within the boundaries of the state. The RWQCB has the authority to take jurisdiction over areas not federally protected under CWA Section 404 provided they meet the definition of waters of the state and SWRCB adopted a new set of procedures for discharges of dredged or fill material into waters of the state on April 2, 2019. Mitigation requiring no net loss of wetland functions and values of waters of the state is required by the RWQCB.

2.5 STATE WETLAND PROCEDURES

The *State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (State Procedures), as prepared by SWRCB (2021). The State Procedures consist of four major elements: 1) a wetland definition; 2) a framework for determining if a wetland feature is a water of the state; 3) wetland delineation procedures; and 4) procedures for the submittal, review, and approval of applications for water quality certifications and waste discharge requirements for dredge or fill activities. The State Procedures include a definition for wetland waters of the state that include (1) all wetland waters of the United States;[1] and (2) aquatic resources that meet both the soils and hydrology criteria for wetland waters of the United States but lack vegetation.[2]

SWRCB has adopted the following definition of wetlands:

> *An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.*

2.6 CALIFORNIA FISH AND GAME CODE

2.6.1 Fully Protected Species

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code prohibit taking of fully protected birds, mammals, reptiles and amphibians, and fish. These statutes prohibit take or possession of fully protected species and generally do not provide for authorization of incidental take unless the species is covered and conserved in a natural community conservation plan, or the project activities qualify for permitting under Senate Bill 147. CDFW's fully protected status was California's first attempt to identify and protect animals that were rare or facing extinction. Most species listed as fully protected were eventually listed as threatened or endangered under CESA; however, some species remain listed as fully protected but do not have simultaneous listing under CESA.

[1] Therefore, wetlands that meet the current definition, or any historic definition, of waters of the U.S. are waters of the state. In 2000, the State Water Board determined that all waters of the U.S. are also waters of the state by regulation, prior to any regulatory or judicial limitations on the federal definition of waters of the U.S. (California Code or Regulations title 23, section 3831(w).) This regulation has remained in effect despite subsequent changes to the federal definition. Therefore, waters of the state includes features that have been determined by the USEPA or the USACE to be "waters of the U.S." in an approved jurisdictional determination; "waters of the U.S." identified in an aquatic resource report verified by the USACE upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of "waters of the U.S." or any current or historic federal regulation defining "waters of the U.S." under the Clean Water Act.

[2] Less than 5 percent areal coverage at the peak of the growing season.

2.6.2 Protection of Bird Nests and Raptors

Section 3503 of the Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 of the California Fish and Game Code states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders *Falconiformes* and *Strigiformes*), including their nests or eggs. Typical violations include destruction of active nests as a result of tree removal or disturbance caused by project construction or other activities that cause the adults to abandon the nest, resulting in loss of eggs or young.

2.6.3 California Native Plant Protection Act

State listing of plant species began in 1977 with the passage of the California Native Plant Protection Act (NPPA), which directed CDFW to carry out the Legislature's intent to "preserve, protect, and enhance endangered plants in this state." The NPPA (California Fish and Game Code Section 1900 et seq.) allows the California Fish and Game Commission to designate plants as rare or endangered. CESA expanded on the original NPPA and enhanced legal protection for plants. CESA established threatened and endangered species categories and grandfathered all rare animals—but not rare plants—into the act as threatened species. Thus, three listing categories for plants are employed in California: rare, threatened, and endangered. Sixty-four species, subspecies, and varieties of plants are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants but includes exceptions for agricultural and nursery operations; for emergencies; and, after proper notification of CDFW, for vegetation removal from canals, roads, and other building sites, changes in land use, and other situations.

2.6.4 California Rare Plant Ranking System

CDFW works in collaboration with the CNPS, a private organization, to maintain a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. These species are categorized by rarity in the California Rare Plant Rank (CRPR) system. This information is published in the Inventory of Rare and Endangered Vascular Plants of California (CNPS 2024). The CRPR system includes six rarity and endangerment ranks, which are summarized as follows:

- 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 more common elsewhere.
- CRPR 2B: Plants Rare, Threatened, or Endangered in California, but more common elsewhere.
- CRPR 3: Plants about which more information is needed - A Review List.
- CRPR 4: Plants of limited distribution - A Watch List.

All plants with a CRPR are considered "special plants" by CDFW. The term "special plants" is a broad term used by CDFW to refer to all plant taxa inventoried in the CNDDB, regardless of their legal or protection status. Plants ranked as CRPR 1A, 1B, 2A, and 2B may be considered under CEQA as endangered, rare, or threatened species within the definition of CEQA Guidelines Section 15380, subdivision (c). That provision gives agencies the discretion to treat species that are not officially listed under ESA or CESA as though they are endangered, rare, or threatened for CEQA purposes if the species can be shown to meet the criteria set forth in subdivision (b) for being rare or endangered. CDFW recommends that CRPR 1 and 2 species be addressed within the context of CEQA analyses and documentation. In general, CRPR 3 and 4 species do not meet the definition of endangered, rare, or threatened pursuant to CEQA Guidelines Section 15380; however, these species should be evaluated by the lead agency on a case-by-case basis to determine significance criteria under CEQA.

2.6.5 Lake and Streambed Alteration

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports fish or wildlife resources are subject to regulation by CDFW under Section 1602 of the

California Fish and Game Code. Under Section 1602, it is unlawful for any person, governmental agency, or public utility to do any of the following without first notifying CDFW:

- substantially divert or obstruct the natural flow of, or
- substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

The regulatory definition of a stream is a body of water that flows at least periodically or intermittently through a bed or channel that has banks and supports fish or other aquatic life. This definition includes watercourses with a surface or subsurface flow that supports or has supported riparian vegetation (California Code of Regulations Title 14, Section 1.72). CDFW jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife. A lake and streambed alteration agreement must be obtained for any diversion or alteration that would substantially adversely affect a fish or wildlife resource in a river, stream, or lake.

2.7 MIGRATORY BIRD TREATY ACT

The Migratory Bird Treaty Act (MBTA), first enacted in 1918, provides for protection of international migratory birds and authorizes the Secretary of the Interior to regulate the taking of migratory birds. The MBTA provides that it is unlawful, except as permitted by regulations, to pursue, take, or kill any migratory bird, or any part, nest, or egg of any such bird. Under the MBTA, "take" is defined as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities." A take does not include habitat destruction or alteration, if there is not a direct taking of birds, nests, eggs, or parts thereof. The current list of species protected by the MBTA can be found in Title 50 of the Code of Federal Regulations (CFR), Section 10.13 (50 CFR 10.13). The list includes nearly all birds that are native to the United States.

2.8 BALD AND GOLDEN EAGLE PROTECTION ACT

The Bald and Golden Eagle Protection Act, enacted in 1940 and amended multiple times since, prohibits the taking of bald and golden eagles without a permit from the Secretary of the Interior. Like the ESA, the Bald and Golden Eagle Protection Act defines "take" to include "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb" (16 U.S. Code 668–668c). "Disturb" means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, injury to an eagle; a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior; or nest abandonment. In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits and causes injury, nest abandonment, or death.

2.9 CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA applies to projects requiring approval by state and local governmental agencies. If a discretionary action by Sonoma County is required to approve the project, then CEQA compliance would be required. "Projects" are public agency actions with potential to have a physical impact on the environment. If development of the property is only subject to County ministerial action, then CEQA may not be required. Once an activity is determined to be a "project" under CEQA, the lead agency must decide whether it is exempt. If it is not exempt, the lead agency must assess the potential for significant environmental effects using thresholds of significance, which are based on applicable parts of Appendix G and Section 15065 of the State CEQA Guidelines.

2.10 HABITAT CONSERVATION PLANS OR NATURAL COMMUNITY CONSERVATION PLANS

The study area is not within the plan area of any adopted habitat conservation plan or NCCP.

3 ENVIRONMENTAL SETTING

The study area is within the Great Basin floristic province of California. It is characterized by low rainfall, hot to very hot summers, and cold winters. The upland portion of the study area is surrounded by barbed wire fencing showing that the site has previously been used for grazing. Much of the fencing is still standing but there are many sections where it has fallen to the ground, allowing for potential movement of wildlife. The Susan River runs along the northern boundary of the study area. There are powerlines that transect the study area, and the study area is surrounded by urban development to the north, SR 36 to the east, a gravel road to the south that was previously a railway with residential and agriculture development south of the gravel road, and a vacant lot to the west with similar habitats and condition as the study area. The study area's elevation range is 4,139 – 4,167 feet.

3.1 WILDLIFE HABITATS AND PLANT COMMUNITIES

The habitat types described in this document were classified using CDFW's *A Guide to Wildlife Habitats of California*, a habitat classification scheme that was developed to support CDFW's California Wildlife Habitat Relationship (CWHR) system (Mayer and Laudenslayer 1988). The CWHR system is a wildlife information system and predictive model for California's regularly occurring wildlife species.

CWHR habitats within the study area are listed in Table 1 and consist of perennial grasslands, sagebrush, annual grassland, montane riparian, riverine, fresh emergent wetland, and alkali desert scrub habitats and developed areas of buildings and roads (Figure 4). Habitats within the 14.15-acre project site are limited to sagebrush, perennial grassland, and fresh emergent wetland. Much of the perennial grassland area is dominated by ruderal nonnative species, primarily by perennial pepperweed (*Lepidium latifolium*). The CWHR system lacks a classification that captures this nonnative perennial herbaceous plant community.

Table 1 California Wildlife Habitat Relationships Habitat Types that Occur in the Study area and Potentially Associated Manual of California Vegetation Alliances

Land Cover/ Habitat Type	Acreage within the Project Site	Acreage within the Study Area	Manual of California Vegetation Alliances
Perennial Grassland	10.08	54.34	Perennial pepper weed - Prickly lettuce patches[2], Ashy ryegrass - Creeping wildrye turfs[1], Salt grass flats
Sagebrush	3.59	17.34	Rubber rabbitbrush scrub
Fresh Emergent Wetland	0.48	4.37	None
Annual Grassland	—	4.88	Cheatgrass - medusahead grassland[2]
Montane Riparian	—	2.41	Sandbar willow thickets
Riverine	—	0.56	No equivalent
Barren	—	0.08	No equivalent
Alkali Desert Scrub	—	0.02	Greasewood scrub
Urban	—	0.01	No equivalent

Notes:

[1] This is a designated sensitive natural community with a state rarity rank of S3 (vulnerable).

[2] These alliances are dominated by nonnative vegetation.

Source: Data compiled by Ascent in 2024 and CNPS 2024.

3.1.1 Perennial Grassland

The study area contains 54.34 acres of perennial grassland, making it the dominant habitat type. A large proportion of the project site (9.72 acres) also consists of perennial grassland habitat. Although mapped as perennial grassland,

much of the area is dominated by the invasive plant perennial pepperweed and other ruderal species. There is no CWHR classification type that describes these areas that are disturbed and dominated by nonnative perennial plant species. Perennial grassland is the closest classification match to this disturbed habitat type.

Perennial pepperweed is included in the California Code of Regulations (CCR) Section 4500 list of California State Noxious Weeds and has a California Invasive Plant Council (Cal-IPC) rating of high. The perennial pepperweed has formed dense, monotypic stands that have displaced all other plant species. Perennial pepperweed inhibits the germination and growth of other plant species that are sensitive to saline soils by extracting salt from deep in the soil and depositing that salt on the soil surface (DiTamaso et al. 2013). Although perennial pepperweed is a prolific seed producer, it primarily reproduces vegetatively from roots and root fragments, root fragments as small as one inch can produce new shoots, making it difficult to control.

There are small patches of perennial grasslands throughout the study area that are more typical of the perennial grassland habitat type, consisting of salt grass (*Distichlis spicata*), Sandberg bluegrass (*Poa secunda*), and beardless wildrye (*Elymus triticoides*). Salt grass is common among the sagebrush habitat but forms pure stands on the edges of the sagebrush-dominated areas. Cheatgrass (*Bromus tectorum*) and medusa head (*Elymus caput-medusae*) are abundant in the perennial grassland habitat.

Other common herbaceous species include tumble mustard (*Sisymbrium altissimum*), poison hemlock (*Conium maculatum*), bull thistle (*Cirsium vulgare*), and Canada thistle (*Cirsium arvense*), all of which are invasive species in California. Bull thistle, poison hemlock and Canada thistle all have the Cal-IPC rating of moderate and are found on the edge of the perennial grassland habitat as it transitions to montane riparian habitat. Canada thistle is also in the southwest corner of the project site. Bull thistle and Canada thistle are included in the CCR Section 4500 list of California State Noxious Weeds. Although, tumble mustard, bull thistle, and Canada thistle are nonnative species, they are nectar sources for the Carson wandering skipper butterfly, a federally endangered species, that has the potential to occur in the study area.

3.1.2 Sagebrush

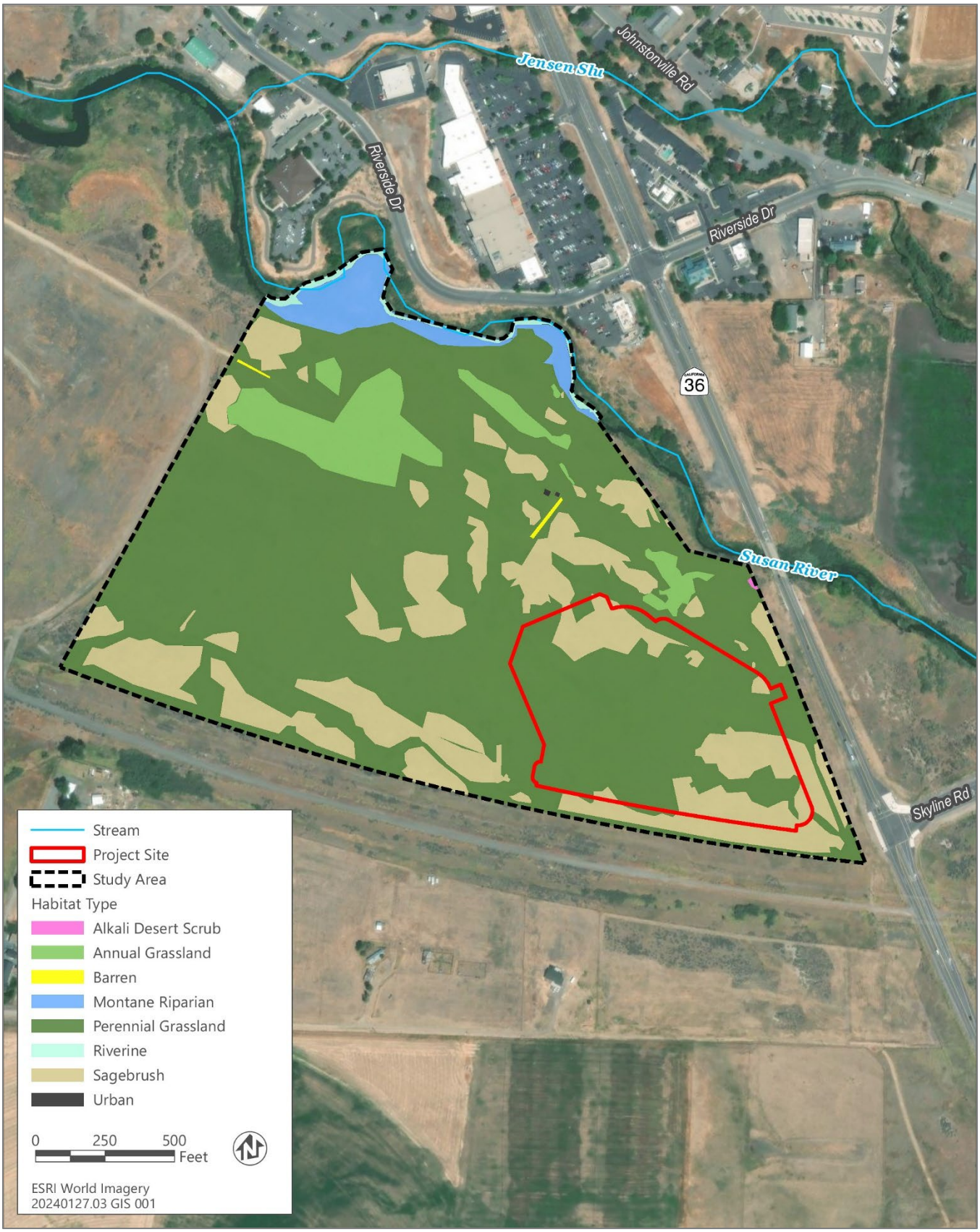
The study area contains 17.34 acres of sagebrush habitat, with 3.59 acres of the sagebrush habitat on the project site. Rubber rabbitbrush (*Ericameria nauseosa*) is the sole dominant species in the shrub layer of the sagebrush habitat, and salt grass is common in interspaces. This habitat type is highly disturbed and has many of the same nonnative upland species that occur in the perennial grassland habitat described above.

3.1.3 Fresh Emergent Wetland

Fresh emergent wetlands cover 4.37 acres in the study area, of which approximately 0.84 acres are on the project site. Vegetation in these wetlands is dominated by some combination of perennial pepperweed, common spikerush (*Eleocharis palustris*), salt grass (*Distchlis spicata*), Beardless wild-rye (*Elymus triticoides*), and Great Basin wild-rye (*Elymus cinereus*).

3.1.4 Annual Grassland

The study area contains 4.88 acres of annual grasslands. Cheatgrass is the dominant species of the annual grassland habitat. It appears that cheatgrass is invading drier portions of the study area that were once dominated by perennial pepperweed.



Source: Adapted by Ascent in 2024.

Figure 4 CWHR Habitat Types

3.1.5 Montane Riparian

The study area contains 2.41 acres of montane riparian habitat on the northern boundary along the Susan River. Narrow-leaf willow (*Salix exigua*) is the dominant species in the montane riparian habitat, forming dense thickets. Poison hemlock is a common herbaceous species found among these willow thickets. There are a few Fremont cottonwoods (*Populus fremontii* ssp. *fremontii*) scattered within the montane riparian habitat along this section of the river. There is no riparian habitat in the 14.15-acre project site.

3.1.6 Riverine

The Susan River occupies 0.56 acres of the study area. The Susan River flows eastward from Silver and Caribou Lakes in the Sierra Nevada down to the Great Basin, discharging at Honey Lake. Precipitation in the western Sierra Nevada headwater portion of the watershed is mostly in the form of snow and influences the flow characteristics of the Susan River (Sutherland 2004). There is no riverine habitat in the 14.15-acre project site.

3.1.7 Barren

Barren areas from old roads that have exposed soils with less than 5 percent vegetation cover are also present in the study area. These barren areas occupy 0.08 acres of the study area.

3.1.8 Alkali Desert Scrub

There is a small, 0.02-acre stand of alkali desert scrub in the northeast corner of the study area, outside of the project site. This area is dominated by greasewood (*Sarcobatus vermiculatus*).

3.1.9 Urban

There are a couple of small buildings in the study area that occupy 0.01 acres of the study area.

3.2 SOILS

Soils present on the study area, according to the USDA Web Soil Survey (USDA 2024), consist of 62.4 acres of Blickenstaff sandy loam, 13.4 acres of Modoc-Truax complex, 2.6 acres of Truckee Loam, 1.0 acres of Lakeview Loam, and 0.3 acres of Susanville-Smocreek complex. The dominant Blickenstaff sandy loam soils are moderately alkaline to very strongly alkaline (USDA 2004). The project site consists entirely of Blickenstaff sandy loam.

3.3 CRITICAL HABITAT

"Critical habitat" is a legal term of art under ESA (16 USC Section 1532(5)). Critical habitats are areas considered essential for the conservation of a species listed under ESA as endangered or threatened under. Critical habitats are specific geographic areas that contain features essential for conservation of listed species and may require special management and protection. Critical habitat may include an area not currently used by an endangered or threatened species, but that will be needed for species recovery. In general, under Section 7 of the ESA (16 U.S.C. Section 1536(a)(2)) federal agencies may not take actions that result in the destruction or adverse modification of critical habitat. A review of GIS-based habitat data for USFWS Critical Habitat for Threatened and Endangered Species (USFWS 2024c) shows that the study area is not located within designated critical habitat for any listed species.

3.4 STATE AND FEDRAL PROTECTED WETLANDS

A total of approximately 7.01 acres of aquatic resources, including wetlands, were documented in the delineation study area, which consisted of the project site and potential off-site improvement areas as well as a buffer of 100 feet (Figure 2). These aquatic resources consist of seven segments of the Susan River, which is classified as lower perennial riverine waters (R2), two channels classified as riverine ephemeral waters (R6), 11 palustrine emergent wetlands (PEM), five palustrine scrub-shrub wetlands (PSS), and two palustrine open water wetlands (POW). Of these aquatic resources, only 0.48 acres of palustrine emergent wetlands are within the 14.5-acre project site (Figure5). Table 2 summarizes the aquatic resources, their acreage within the study area, and their expected jurisdictional status under applicable federal and state regulations. The complete methodology and results of the delineation are provided in a separate report.

Table 2 Aquatic Resources and State and Federal Regulations to Which They Are Subject

Aquatic Resource Name	Acres	Federal Clean Water Act Regulations	State Wetlands Procedures Regulations	California Fish and Game Code Section 1602 Regulations
Other Waters				
Riverine Lower Perennial (R2)				
R2-1	0.26	X	X	X
R2-2	0.11	X	X	X
R2-3	0.10	X	X	X
R2-4	0.04	X	X	X
R2-5	0.09	X	X	X
R2-6	0.01	X	X	X
R2-7	0.02	X	X	X
Riverine Ephemeral (R6)				
R6-1	0.07	—	X	—
R6-2	0.08	—	X	—
Wetlands				
Palustrine Emergent Wetland (PEM)				
PEM-1	0.29	—	X	—
PEM-2	0.03	—	X	—
PEM-3	0.60	—	X	—
PEM-4	0.71	—	X	—
PEM-5	0.29	—	X	—
PEM-6	0.84	—	X	—
PEM-7	0.07	—	X	—
PEM-8	0.66	—	X	—
PEM-9	0.24	—	X	—
PEM-10	0.23	—	X	—
PEM-11	0.41	—	X	—
Palustrine Scrub-Shrub Wetland (PSS)				
PSS-1	0.38	—	X	-
PSS-2	0.20	X	X	X
PSS-3	0.08	X	X	X

Aquatic Resource Name	Acres	Federal Clean Water Act Regulations	State Wetlands Procedures Regulations	California Fish and Game Code Section 1602 Regulations
PSS-4	0.05	X	X	X
PSS-5	0.05	X	X	X
Palustrine Open Water Wetland (POW)				
POW-1	0.04	—	X	—
POW-2	0.37	—	X	—

Source: Compiled by Ascent in 2025.

3.5 RIPARIAN HABITAT AND OTHER SENSITIVE NATURAL COMMUNITIES

Sensitive natural communities are those native plant communities defined by CDFW as having limited distribution statewide or within a county or region and that are often vulnerable to environmental effects of projects (CDFW 2024a). These communities may or may not contain special-status plants or their habitat (CDFW 2024a). CDFW designates sensitive natural communities based on their state rarity and threat ranking using NatureServe's Heritage Methodology. Natural communities with rarity ranks of S1 to S3, where S1 is critically imperiled, S2 is imperiled, and S3 is vulnerable, are considered sensitive natural communities to be addressed in the environmental review processes of CEQA and its equivalents (CDFW 2024a). Sensitive natural communities are generally identified at the alliance level of vegetation classification hierarchy using the Manual of California Vegetation (Sawyer et al. 2009). Ashy ryegrass - Creeping wildrye turfs is a sensitive natural community identified in the study area and extending into the northwest corner of the project site. This vegetation alliance has a state rarity ranking of S3 and is therefore considered a sensitive natural community under CEQA.

Many riparian plant communities qualify as sensitive natural communities based on the plant associations therein. In addition, riparian habitats are protected under Section 1602 of California Fish and Game Code. There are 2.41 acres of riparian habitat in the study area but none within the 14.15-acre project site.

3.6 WILDLIFE CORRIDORS

Wildlife movement corridors are considered an important ecological resource by various agencies, including CDFW and USFWS, and under CEQA guidelines. Movement corridors may provide favorable locations for wildlife to travel between different habitat areas such as foraging sites, breeding sites, cover areas, and preferred summer and winter range locations. They may also function as dispersal corridors allowing animals to move between various locations within their range. Topography and other natural factors, in combination with urbanization, can fragment or separate large open-space areas. Areas of human disturbance or urban development can fragment wildlife habitats and impede wildlife movement between areas of suitable habitat. This fragmentation creates isolated "islands" of habitat that may not provide sufficient area or resources to support long-term, sustainable populations and can adversely affect genetic and species diversity. Movement corridors can mitigate the effects of this fragmentation by allowing animals to move between remaining habitats and promoting genetic exchange between separate populations.

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Source: Data collected by Ascent in 2025; adapted by Ascent in 2025.

Figure 5 Aquatic Resources in Project Site

The study area is mapped as an area of limited connectivity opportunities and is outside any essential connectivity area (CDFW 2024b) and the project site does not provide a connection between open space areas that would otherwise be isolated. The Susan River and its associated riparian and aquatic habitats provide a potential corridor for movement within and across the study area for some aquatic and terrestrial species. However, the actual functions and values of the Susan River corridor for wildlife movement depend on several local and regional variables, including specific habitat requirements of species potentially using the corridor and habitat quality within the corridor, corridor size and dimensions, the types and magnitude of edge effects (from adjacent land cover and uses), and presence of movement barriers. For example, in the study area, the Susan River corridor and uplands are influenced by SR 36, commercial and residential developments, and agriculture; these disturbance factors limit the overall quality and function of the Susan River corridor for wildlife movement. Additionally, project activities will avoid riparian and aquatic habitats of the Susan River. Therefore, project construction would not interfere with wildlife movement over the long-term, although some species might avoid using the study area during construction.

3.7 SPECIAL-STATUS SPECIES

Special status species are defined as species that are legally protected or that are otherwise considered sensitive by federal, state, or local resource agencies. Special-status species are species, subspecies, or varieties in one or more of the following categories, regardless of their legal or protection status:

- officially listed by the federal government under the Endangered Species Act (ESA) as endangered or threatened;
- officially listed by the State of California under the California Endangered Species Act (CESA) as endangered, threatened, or rare;
- a candidate for state or federal listing;
- taxa (i.e., taxonomic category or group) that meet the criteria for listing, even if not currently included on any list, as described in CCR Section 15380 of the State CEQA Guidelines;
- species identified by CDFW as species of special concern;
- species listed as fully protected under the California Fish and Game Code;
- species afforded protection under local planning documents; and
- taxa considered by the CDFW to be "rare, threatened, or endangered in California" and assigned a CRPR of 1A, 1B, 2A or 2B.

The term "California species of special concern" is applied by CDFW to animals not listed under ESA or CESA, but that are declining at a rate that could result in listing, or that historically occurred in low numbers and known threats to their persistence currently exist. These species generally meet the definition of rare, endangered, or threatened pursuant to Section 15380 of the State CEQA Guidelines.

A preliminary list of special-status plant and animal species known or with potential to occur in the study area was developed based on a review of the sources listed in Section 1.2, "Data Review and Survey Methods" of this report. Database queries identified 24 special-status plant species and 32 special-status wildlife species with recorded occurrences in the project vicinity (Tables 3 and 4). Of the 56 species, 25 species were removed from further consideration based on a lack of suitable habitat in or adjacent to the project site, or because the project site is outside the known range of the species. A total of 11 special-status wildlife species were determined to have potential to occur on or adjacent to the project site in areas that may be directly or indirectly affected by project activities; however, two of these species, bank swallow and tricolored blackbird, were eliminated after species focused surveys. Bank swallow, a special-status bird species listed as threatened under CESA had been previously documented in the study area, but no signs of this species or tricolored blackbird were found during surveys conducted according to CDFW guidelines during the breeding season in 2025. Special-status wildlife species that are known to occur or may occur, as identified in Table 4, are the focus of the constraints analysis for special-status wildlife species presented in Section 4.5.

Nine special-status plant species were initially determined to have potential to occur on or adjacent to the project site in areas that may be directly or indirectly affected by project activities. These nine species have CRPR rankings of 1B and 2B; none are listed as threatened or endangered under ESA or CESA. As described above under the heading "Data Review and Survey Methods," a botanical survey for special-status plants was conducted in June 2025. During this survey, no special-status plant species were observed in the survey area. Although the June 2025 survey was conducted outside of the July to October bloom period for sticky pyrrocoma, vegetative growth would have been observed during the survey if it were present in the survey area, and no species in the genus *Pyrrocoma* were found during the survey. Therefore, although suitable habitat for nine special-status plant species is present in the study area, no occurrences were identified during focused surveys, and these species are not expected to occur in the study area.

Table 3 Special-Status Plants Known to Occur in the Project Region and their Potential to Occur in the Study Area

Name	CRPR[1]	Habitat	Potential to Occur in the Study area
Grass alisma *Alisma gramineum*	2B.2	Wetland. Marshes and swamps. Freshwater marsh. 410–5,690 feet in elevation. Blooms June–August. Geophyte.	*Not expected to occur.* The study area lacks marsh and swamp wetland suitable for grass alisma.
Threetip sagebrush *Artemisia tripartita* ssp. *tripartita*	2B.3	Upper montane coniferous forest. Openings in the forest. Rocky, volcanic soils. 7,495–8,005 feet in elevation. Blooms August. Perennial.	*Not expected to occur.* The study area is below the known elevation range of three tip sagebrush.
Pulsifer's milk-vetch *Astragalus pulsiferae* var. *pulsiferae*	1B.2	Great Basin scrub, lower montane coniferous forest, pinyon and juniper woodland. Usually granitic substrate, sandy or rocky, often with pines or sagebrush. 3,755–6,100 feet in elevation. Blooms May–August (September). Perennial.	*Not expected occur.* The study area contains Great Basin (i.e., sagebrush) scrub that may be habitat for Pulsifer's milk-vetch; however, this species was not found during botanical surveys conducted within the blooming period in 2025.
Upswept moonwort *Botrychium ascendens*	2B.3	Lower montane coniferous forest, meadows and seeps. Grassy fields, coniferous woods near springs and creeks. 3,660–10,710 feet in elevation. Blooms July–August. Geophyte.	*Not expected to occur.* The study area lacks meadow and seep habitats in lower montane coniferous forests suitable for upswept moonwort.
Scalloped moonwort *Botrychium crenulatum*	2B.2	Wetland. Bogs and fens, meadows and seeps, upper montane coniferous forest, lower montane coniferous forest, marshes and swamps. Moist meadows, freshwater marsh, and near creeks. 3,890–10,205 feet in elevation. Blooms June–September. Geophyte.	*Not expected to occur.* The study area lacks wetland habitats in montane coniferous forests suitable for scalloped moonwort.
Western goblin *Botrychium montanum*	2B.1	Old growth. Lower montane coniferous forest, upper montane coniferous forest, meadows and seeps. Creekbanks in old-growth forest. 4690–7970 feet in elevation. Blooms July–September. Geophyte.	*Not expected to occur.* The study area lacks old growth forest habitats suitable for this species.
Watershield *Brasenia schreberi*	2B.3	Wetland. Freshwater marshes and swamps. Aquatic from water bodies both natural and artificial in California. 100–7,220 feet in elevation. Blooms June–September. Geophyte.	*Not expected to occur.* The study area lacks wetland habitat suitable for this species.
Davy's sedge *Carex davyi*	1B.3	Subalpine coniferous forest, upper montane coniferous forest. 4,790–10,595 feet in elevation. Blooms May–August. Perennial.	*Not expected to occur.* The study area is below the elevation range of Davy's sedge, and it lacks suitable forest habitat.

Name	CRPR[1]	Habitat	Potential to Occur in the Study area
Sheldon's sedge *Carex sheldonii*	2B.2	Wetland Lower montane coniferous forest, marshes and swamps, riparian scrub. Mesic sites; along creeks and in wet meadows. 3,935–6,610 feet in elevation. Blooms May–August. Geophyte.	*Not expected to occur.* The study area contains riparian habitat along the Susan River that may be suitable for this species; however, this species was not found during botanical surveys conducted within the blooming period in 2025.
Ochre-flowered buckwheat *Eriogonum ochrocephalum* var. *ochrocephalum*	2B.2	Great Basin scrub, pinyon and juniper woodland. Volcanics or clay. 3,935–7,905 feet in elevation. Blooms May–June. Perennial.	*Not expected to occur.* The study area contains Great Basin scrub habitat that may be suitable for Ochre-flowered buckwheat; however, this species was not found during botanical surveys conducted within the blooming period in 2025.
Aleppo avens *Geum aleppicum*	2B.2	Meadows in Great Basin scrub or lower montane coniferous forest. 1,475–4,920 feet in elevation. Blooms June–August. Perennial.	*Not expected to occur.* The study area lacks meadow habitat suitable for Aleppo avens.
Plumas ivesia *Ivesia sericoleuca*	1B.2	Wetland Great Basin scrub, lower montane coniferous forest, meadows and seeps, vernal pools. Vernally mesic areas; usually volcanic substrates. 4,315–7,005 feet in elevation. Blooms May–October. Perennial.	*Not expected to occur.* The study area contains Great Basin scrub with areas that are seasonally inundated that may be suitable habitat for Plumas Ivesia; however, this species was not found during botanical surveys conducted within the blooming period in 2025.
Dudley's rush *Juncus dudleyi*	2B.3	Wetland. Lower montane coniferous forest (mesic). Wet areas in forest. 1,495–6,560 feet in elevation. Blooms July–August. Perennial.	*Not expected to occur.* The study area lacks forest habitat suitable for this species.
Santa Lucia dwarf rush *Juncus luciensis*	1B.2	Vernal pools, meadows and seeps, lower montane coniferous forest, chaparral, Great Basin scrub. Vernal pools, ephemeral drainages, wet meadow habitats and streamsides. 985–6,695 feet in elevation. Blooms April–July. Annual.	*Not expected to occur.* The study area contains Great Basin scrub with areas that are seasonally inundated that may be suitable habitat for Santa Lucia Dwarf rush; however, this species was not found during botanical surveys conducted within the blooming period in 2025.
Adobe lomatium *Lomatium roseanum*	1B.2	Lower montane coniferous forest, Great Basin scrub. Rocky, gravelly openings. 5,875–7,400 feet in elevation. Blooms May–July. Perennial.	*Not expected to occur.* The study area contains Great Basin scrub habitat but lacks gravelly openings suitable for *Adobe lomatium*.
Long bluebells *Mertensia longiflora*	2B.2	Great Basin scrub, lower montane coniferous forest. 4,345–6,005 feet in elevation. Blooms April–June. Perennial.	*Not expected to occur.* The study area contains Great Basin scrub habitat that may be suitable for long bluebells; however, this species was not found during botanical surveys conducted within the blooming period in 2025.
Janish's beardtongue *Penstemon janishiae*	2B.2	Great Basin scrub, lower montane coniferous forest, pinyon and juniper woodland. Volcanic soils; gravelly sites. 4,380–7,300 feet in elevation. Blooms May–July. Perennial.	*Not expected to occur.* The study area contains Great Basin scrub habitat but lacks gravelly openings suitable for Janish's beardtongue and the study area is slightly below the known elevation range of Janish's beardtongue.

Name	CRPR[1]	Habitat	Potential to Occur in the Study area
Playa phacelia *Phacelia inundata*	1B.3	Great Basin scrub, lower montane coniferous forest, playas. Dried edges of alkali lakes and sinks, inundated clay soils. 4430–6560 feet in elevation. Blooms May–August (September). Annual.	*Not expected to occur.* The study area contains Great Basin scrub habitat with seasonally inundated depressions in alkali soils that may be suitable for playa phacelia; however, this species was not found during botanical surveys conducted within the blooming period in 2025.
Squarestem phlox *Phlox muscoides*	2B.3	Alpine boulder and rock field, subalpine coniferous forest, Great Basin scrub. Open rocky slopes. 4,200–8,860 feet in elevation. Blooms (May), June–August. Perennial.	*Not expected to occur.* The study area lacks rocky slopes suitable for squarestem phlox.
Sticky pyrrocoma *Pyrrocoma lucida*	1B.2	Lower montane coniferous forest, meadows and seeps, Great Basin scrub. Alkaline flats, clay soils. 2,495–6,855 feet in elevation. Blooms July–October. Perennial.	*Not expected to occur.* The study area contains Great Basin scrub habitat with alkali soils that may be suitable for sticky pryrrocoma; however, this species was not found during botanical surveys conducted in 2025.
Macoun's buttercup *Ranunculus macounii*	2B.2	Great Basin scrub, meadows and seeps, pinyon-juniper woodland. Mesic sites. 4,595–5,905 feet in elevation. Blooms June–July. Perennial.	*Not expected to occur.* The study area is below the known elevation range of Macoun's buttercup.
Alder buckthorn *Rhamnus alnifolia*	2B.2	Wetland. Meadows and seeps, lower montane coniferous forest, upper montane coniferous forest, riparian scrub. Mesic sites. 4,690–7,005 feet in elevation. Blooms May–July. Perennial.	*Not expected to occur.* The study area is below the known elevation range of alder buckthorn.
Winged dock *Rumex venosus*	2B.3	Great Basin scrub. Sandy substrates; broadly distributed; just barely gets into California at Honey Lake Valley. 3,935–5,905 feet in elevation. Blooms May–June. Perennial.	*Not expected to occur.* The study area contains Great Basin scrub habitat that may be suitable for winged dock; however, this species was not found during botanical surveys conducted within the blooming period in 2025.
Northern slender pondweed *Stuckenia filiformis* ssp. *alpina*	2B.2	Wetland. Marshes and swamps. Shallow, clear water of lakes and drainage channels. 985–7,055 feet in elevation. Blooms May–July. Geophyte.	*Not expected to occur.* The study area lacks wetland habitat suitable for northern slender pondweed.

Notes: CRPR = California Rare Plant Rank; CNDDB = California Natural Diversity Database.

[1] Legal Status Definitions

California Rare Plant Ranks:

1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA)

2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA)

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)

No federally or state listed plant species have potential to occur within the study area.

Sources: CNDDB 2024; CNPS 2024.

Table 4 Special-Status Wildlife Known to Occur in the Project Region and their Potential to Occur in the Study Area

Name	Federal Status[1]	State Status[1]	Habitat	Potential to Occur in the Study area
Invertebrates				
Western bumble bee *Bombus occidentalis*		SC	Once common throughout much of its range, in California, this species is currently largely restricted to high elevation sites in the Sierra Nevada and the northern California coast. Habitat includes open grassy areas, chaparral, scrub, and meadows. Requires suitable nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the colony period (spring, summer, and fall), and suitable overwintering sites for the queens.	*May occur.* The study area contains floral resources and potentially suitable nesting sites to support Western bumble bee.
Monarch Butterfly *Danaus plexippus*	FC		Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Along migration routes and within summer ranges, monarch butterflies require two suites of plants: (1) host plants for monarch caterpillars, which are primarily milkweeds (*Asclepias* spp.) within the family Apocynaceae upon which adult monarchs lay eggs; and (2) nectar-producing flowering plants of many other species that provide food for adult butterflies. Having both host and nectar plants available from early spring to late fall and along migration corridors is critical to the survival of migrating pollinators.	*Not expected to occur.* The study area does not contain the host milkweed species to support monarch butterfly and does not provide overwintering roost sites.
Carson Wandering Skipper *Pseudocopaeodes eunus obscurus*	FE		Great Basin grassland. Found in grasslands on alkaline substrates in eastern California (around Honey Lake) and western Nevada (Washoe County) below 5,000 feet. The larval host plant is salt grass. Needs open areas near springs or other fresh water.	*Not expected to occur.* The host plant species, salt grass, is present on the project site; however, the project site and surrounding study area lack sufficient nectar plants for this species. Additionally, the study area is infested with cheatgrass and perennial pepperweed, which generally make it unsuitable for this species.
Fish				
Eagle Lake rainbow trout *Oncorhynchus mykiss aquilarum*	—	SSC	Great Basin standing waters. Endemic to Eagle Lake, Lassen County, and its main tributaries, Pine and Papoose creeks.	*Not expected to occur.* The study area lacks standing water aquatic features to support Eagle Lake rainbow trout.
Eagle Lake tui chub *Siphateles bicolor* ssp. 12	—	SSC	Found only in Eagle Lake, Lassen County. Requires beds of aquatic vegetation in shallow, inshore areas for successful spawning.	*Not expected to occur.* The study area lacks aquatic features to support Eagle Lake tui chub.

Name	Federal Status[1]	State Status[1]	Habitat	Potential to Occur in the Study area
Lahontan mountain sucker *Catostomus lahontan*	—	SSC	Occur in the Walker, Carson, Truckee and Susan river drainages of the Lahontan basin in the eastern Sierra Nevada, but not in the Eagle Lake basin. Also found in the North Fork Feather River drainage, mainly in Red Clover Creek. Found in shallow (less than 2 m), clear, low-gradient streams; associated with diverse substrates, from sand to boulders, in areas with dense cover. Have been found in streams at elevations up to 2,800 m and at temperatures of 1-25C.	*May occur.* The study area is adjacent to the Susan River, which may support Lahontan mountain sucker.
Amphibians				
Sierra Nevada yellow-legged frog *Rana sierrae*	FE	ST	Always encountered within a few feet of water. Tadpoles may require 2 to 4 years to complete their aquatic development.	*Not expected to occur.* The study area is outside the known range for Sierra Nevada yellow-legged frog (USFWS 2024d).
Southern long-toed salamander *Ambystoma macrodactylum sigillatum*	—	SSC	High elevation meadows and lakes in the Sierra Nevada, Cascade, and Klamath mountains with suitable woody debris and detritus to provide cover. Aquatic larvae occur in ponds and lakes. Outside of breeding season adults are terrestrial and associated with underground burrows of mammals and moist areas under logs and rocks.	*Not expected to occur.* The study area is outside the known range for southern long-toed salamander (Thomson et al. 2016).
Reptiles				
Northwestern pond turtle *Actinemys marmorata*	FP	SSC	Ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	*May occur.* The study area contains Susan River and potentially suitable basking sites and upland habitat for egg-laying to support northwestern pond turtle.
Birds				
American peregrine falcon *Falco peregrinus anatum*	FD	SD	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	*Not expected to occur*. The study area contains suitable foraging habitat but lacks nests sites to support peregrine falcon.
Bald eagle *Haliaeetus leucocephalus*	FD	SE, FP	Lower montane coniferous forest, old growth. Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests are within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	*May occur.* The study area contains Susan River with cottonwood trees along its banks that may support bald eagle. There are many observations on eBird of bald eagles in Susanville and along the Susan River.
Bank swallow *Riparia riparia*	—	ST	Riparian scrub, riparian woodland. Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	*Not expected to occur*. There is a mapped occurrence of bank swallow along the Susan River on the northwest corner of the study area (CNDDB 2024); however, this species was not observed during nesting bird surveys conducted during the 2025 nesting season.

Name	Federal Status[1]	State Status[1]	Habitat	Potential to Occur in the Study area
Black tern *Chlidonias niger*	—	SSC	Freshwater marsh, Great Basin standing waters, and wetlands. Freshwater lakes, ponds, marshes and flooded ag fields. At coastal lagoons and estuaries during migration. Breeding range reduced. Breeds primarily in Modoc Plateau region, with some breeding in Sacramento and San Joaquin valleys	*Not expected to occur.* The study area lacks aquatic and wetland habitat suitable to support black tern.
California spotted owl *Strix occidentalis occidentalis*	FP	SSC	Broadleaved upland forest, lower montane coniferous forest, and upper montane coniferous forest. Mixed conifer forest, often with an understory of black oaks and other deciduous hardwoods. Canopy closure greater than 40 percent. Most often found in deep-shaded canyons, on north-facing slopes, and within 300 meters of water.	*Not expected to occur.* The study area lacks forest habitat to support California spotted owl.
Greater sage-grouse *Centrocercus urophasianus*	—	SC, SSC	Great Basin scrub. Found in the northeastern, Great Basin portion of state. Restricted to flat/rolling terrain vegetated by sagebrush, upon which it depends for both food and shelter.	*Not expected to occur.* The study area lacks sagebrush (*Artemisia tridentata*) to support greater sage-grouse. The shrub areas within the study area are dominated by rubber rabbitbrush.
Greater sandhill crane *Antigone canadensis tabida*	—	ST, FP	Marsh and swamp, meadow and seep, wetland. Nests in wetland habitats in northeastern California; winters in the Central Valley. Prefers grain fields within 4-miles of a shallow body of water used as a communal roost site; irrigated pasture used as loafing sites.	*Not expected to occur.* The study area lacks wetland habitat suitable for greater sandhill crane nesting.
Loggerhead shrike *Lanius ludovicianus*	—	SSC	Broadleaved upland forest, desert wash, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodlands, riparian woodland, Sonoran desert scrub. Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	*May occur.* The study area contains riparian vegetation of dense willows that may support nesting of loggerhead shrike and open areas for hunting.
Northern harrier *Circus hudsonius*	—	SSC	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	*May occur.* The study area contains perennial grassland habitat that may support northern harrier.
Swainson's hawk *Buteo swainsoni*	—	ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	*May occur.* Trees providing potential nest sites for Swainson's hawks are present along the Susan River and the study area provides habitat suitable for Swainson's hawk foraging. Many observations of Swainson's hawk have been recorded on eBird in Susanville and surrounding areas; however, no nesting Swainson's hawks were observed during the nesting bird surveys conducted during the 2025 nesting season, and the project site does not contain trees suitable for nesting Swainson's hawks.

Name	Federal Status[1]	State Status[1]	Habitat	Potential to Occur in the Study area
Tricolored blackbird *Agelaius tricolor*	—	ST, SSC	Freshwater marsh, marsh and swamp, swamp, wetland. Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	*Not expected to occur.* Habitat suitable for tricolored blackbird nesting is present in the study area along the Susan River and the entire study area provides foraging habitat suitable for this species. Many observations of tricolored blackbirds have been recorded on eBird near the study area; however, this species was not observed in the study area during protocol level tricolored blackbird surveys conducted during the 2025 nesting season
White-faced ibis *Plegadis chihi*	—		Marsh and swamp, wetlands. Shallow fresh-water marsh. Dense tule thickets for nesting interspersed with areas of shallow water for foraging.	*Not expected to occur.* The study area lacks marsh or swamp wetland habitat to support white-faced ibis.
Yellow rail *Coturnicops noveboracensis*	—	SSC	Freshwater marsh, meadows and seeps. Summer resident in eastern Sierra Nevada in Mono County. Fresh-water marshlands.	*Not expected to occur.* The study area lacks freshwater marsh habitat to support yellow rail.
Yellow warbler *Setophaga petechia*	—	SSC	Riparian forest, riparian scrub, riparian woodland. Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	*May occur.* The study area contains riparian vegetation of dense willows that may support yellow warbler.
Yellow-headed blackbird *Xanthocephalus xanthocephalus*	—	SSC	Marsh and swamp, wetland. Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects such as Odonata are abundant, nesting timed with maximum emergence of aquatic insects.	*Not expected to occur.* The study area lacks marsh or swamp wetland habitat to support yellow headed blackbird.
Mammals				
American badger *Taxidea taxus*	—	SSC	Alkali marsh, alkali playa, alpine, alpine dwarf scrub, bog a fen, brackish marsh, broadleaved upland forest, chaparral, chenopod scrub, cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal dunes, coastal prairie. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	*Not expected to occur.* The study area contains shrub and herbaceous habitats that may be suitable for American badger. There is a mapped occurrence of American badger adjacent to the study area (CNDDB 2024); however, clay soils present at the project site makes burrowing and occupied dens on the project site unlikely.
Fisher *Pekania pennanti*	—	SSC	North coast coniferous forest, old growth, riparian forest. Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest. Endangered status applies to Southern Sierra DPS.	*Not expected to occur.* The study area lacks forest habitat to support fisher.

Name	Federal Status[1]	State Status[1]	Habitat	Potential to Occur in the Study area
Gray wolf *Canis lupus*	FE	SE	Habitat generalists, historically occupying diverse habitats including tundra, forests, grasslands, and deserts. Primary habitat requirements are the presence of adequate ungulate prey, water, and low human contact.	*Not expected to occur.* The known California gray wolf packs and areas of known activity are outside the study area (CDFW 2024c). The study area is surrounded by development that makes it unsuitable habitat for gray wolf.
Pallid bat *Antrozous pallidus*	—	SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Tree roosting has also been documented in large conifer snags, inside basal hollows of redwoods and giant sequoias, and bole cavities in oaks. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	*May occur.* The study area contains cottonwood trees near Susan River that could provide roosting sites for pallid bat.
Sierra Nevada mountain beaver *Aplodontia rufa californica*	—	SSC	Riparian forest, riparian scrub, riparian woodland. Dense growth of small deciduous trees and shrubs, wet soil, and abundance of forbs in the Sierra Nevada and east slope. Needs dense understory for food and cover. Burrows into soft soil. Needs abundant supply of water.	*Not expected to occur*. While the study area contains riparian habitat along Susan River, it is not characteristic of the habitats in which Sierra Nevada mountain beavers are typically found because it lacks sufficient cover of willows and alders, does not have wet soils throughout the year.
Sierra Nevada red fox - southern Cascades DPS *Vulpes vulpes necator* pop. 1	—	ST	Use multiple habitat types in the alpine and subalpine zones including high-elevation conifer dominated by whitebark pine and mountain hemlock, as well as meadows and fell-fields. May descend in winter to below subalpine zone consisting of red and white fir; as low as 1,400 meters (4,600 feet).	*Not expected to occur.* The study area lacks alpine, subalpine, and fir forest habitats to support Sierra Nevada red fox.
Wolverine *Gulo gulo*	—	ST, FP	Alpine, alpine dwarf scrub, meadow and seep, montane dwarf scrub, north coast coniferous forest, riparian forest, subalpine coniferous forest, upper montane coniferous forest, wetland. Found in the north coast mountains and the Sierra Nevada. Found in a wide variety of high elevation habitats. Needs water source. Uses caves, logs, burrows for cover and den area. Hunts in more open areas. Can travel long distances.	*Not expected to occur.* The study area lacks habitat suitable for wolverine.

General references: Unless otherwise noted all habitat and distribution data provided by CNDDB.

Note: CNDDB = California Natural Diversity Database

[1] Legal Status Definitions

Federal:
FE Endangered (legally protected)
FT Threatened (legally protected)

State:
SE Endangered (legally protected)
ST Threatened (legally protected)
FP Fully protected (legally protected)
SSC Species of special concern (no formal protection other than CEQA consideration)

Source: CNDDB 2024; USFWS 2024c.

3.8 COMMON RAPTOR SPECIES

Common raptor species, such as red-tailed hawk (*Buteo jamaicensis*), do not meet the definition of rare, threatened, or endangered pursuant to CCR Section 15380 of the State CEQA Guidelines. However, nests of these species are protected under the MBTA and Section 3503.5 of the California Fish and Game Code. Section 3503.5 of the Code prohibits take, possession, or destruction of any birds in the orders Falconiformes (hawks) or Strigiformes (owls), or of their nests and eggs. Common raptor species in these orders may nest on or adjacent to the project site and could abandon their nests in response to project construction disturbances if mitigation measures are not implemented to avoid nest disturbance.

3.9 COMMON MIGRATORY BIRDS

Many common bird species are migratory and are afforded protection under the MBTA. Occupied nests of all migratory birds are protected under the MBTA, which makes it illegal to intentionally take these species or destroy their eggs. In addition, under Section 3503 of the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 of the Code prohibits take, possession, or destruction of any birds in the orders Falconiformes (hawks) or Strigiformes (owls), or of their nests and eggs. Migratory non-game birds are protected under Section 3800, while other specified birds are protected under Section 3505. Common bird species protected under MBTA, or Fish and Game Code may nest in habitats on or adjacent to the project site and could abandon their nests in response to project construction disturbances if mitigation measures are not implemented to avoid nest disturbance.

4 BIOLOGICAL CONSTRAINTS

4.1 STATE AND FEDERAL PROTECTED WATERS AND WETLANDS

4.1.1 Impact Analysis

During the aquatic resources delineation conducted during April 2025, a total of approximately 7.01 acres of aquatic resources that may be protected under state or federal regulations were documented in the study area, including the Susan River, a distributary stream, and several wetlands (e.g., palustrine emergent wetlands, palustrine scrub-shrub wetlands, and palustrine open water wetlands). Of these, two palustrine emergent wetlands encompassing a total of approximately 0.48 acres are on the project site and the remaining 6.53 acres are within the potential off-site improvement areas. The complete methodology and results of the delineation are provided in a separate report.

Susan River is a jurisdictional water of the United States and water of the state. Project activities would result in substantial earth disturbance (trenching, grading and filling) but are in areas that are set back from the Susan River; therefore, sediment and debris are not expected to mobilize into the river. However, the proposed sewer line option would cross the Susan River by attaching pipe to the Main Street Bridge, or, if Caltrans deems it impermissible, by horizontal directional drilling under the river. Additionally, gas and water lines would be attached to the Skyline Road Bridge over the Susan River and another bridge over a distributary of the Susan River at Skyline Road. Indirect impacts to the Susan River and the distributary stream could result from construction of these off-site utilities. In general, indirect impacts can include inadvertent release of sediment or chemicals, altered hydrology, and increased erosion and sedimentation through soil disturbance and vegetation removal. Implementation of an Inadvertent Release (Frac-out) Contingency Plan for Horizontal Directional Drilling and best management practices to safeguard watercourses from excessive deposition of sediment or debris and would avoid indirect impacts on water quality in the Susan River and other waters.

Construction of the Travel Stop would result in the direct loss of the 0.48 acres of state-protected palustrine emergent wetlands on the project site. Other off-site utilities, including improvements to Hwy 36, extension of Skyline Road to the west of Hwy 36 to provide access to the project site, and potential gas and water lines could result in fill of additional state protected wetlands concentrated along the former railroad berm along the southern border of the project site and along the west side of Hwy 36. Section 404 of the CWA requires that a permit be obtained from USACE prior to the discharge of dredged or fill materials into any "waters of the United States," which includes wetlands and intermittent and perennial stream channels. Section 404 permits generally require mitigation to offset losses of aquatic habitats, in accordance with Executive Order 11990, which is intended to result in no net loss of wetland acres and functions. Waters of the state are defined as any surface or subsurface water and are protected by the Porter-Cologne Act. Fill of waters of the state, including state protected wetlands, also requires mitigation to offset losses of aquatic habitats. Additionally, work in, above, or near the river or distributary stream could require a Streambed Alteration Agreement with CDFW pursuant to Section 1602 of California Fish and Game Code.

4.1.2 Recommendations

Activities, including directional drilling, that have potential to divert or obstruct the natural flow or substantially change, or use any material from the bed, bank, or channel of Susan River or distributary streams would require notification of lake or streambed alteration be submitted to CDFW. If the project design changes and direct impacts to Susan River are anticipated (such as jacking and boring the sewer line under the Susan River), the project proponent would need to acquire a CWA Section 404 permit from the USACE and a CWA Section 401 Water Quality Certification from the Lahontan RWQCB. If the project would involve utility crossings over or under the river, the applicant would be required to notify CDFW of lake or streambed alteration.

- The project applicant would design the project to avoid impacts to waters of the United States and state, including wetlands, to the extent feasible. If the project could not be designed to avoid state or federally protected wetlands and other waters, the delineation report would be submitted to USACE, and a jurisdictional determination would be requested.

- If state or federally protected wetlands within the project site that can be avoided, the qualified biologist would establish a buffer around these wetlands and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The buffer would be a minimum width of 25 feet but may be larger if deemed necessary. The appropriate size and shape of the buffer zone would be determined in coordination with the qualified biologist and would depend on the type of wetland present (e.g., stream, fresh emergent wetland), the timing of project activities (e.g., wet or dry time of year), environmental conditions and terrain, and the project activity being implemented.

  Project activities (e.g., ground disturbance, vegetation removal, staging) would be prohibited within the established buffer. The qualified biologist would periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided.
- If it is determined that fill of wetlands or other waters of the United States would result from project implementation, authorization for such fill would be secured from USACE and the RWQCB through CWA Sections 401 and 404 permitting processes. In association with the Section 404 permit (if applicable) and prior to the issuance of any grading permit, Section 401 Water Quality Certification from the Lahontan RWQCB would be obtained. For impacts on waters of the state and state protected wetlands that are not also waters of the United States and are therefore not covered by the 401 Water Quality Certification, the applicant would apply to the Lahontan RWQCB for Waste Discharge Requirements following the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB 2019). Any wetlands or other waters of the United States or waters of the state that are filled by the project will be replaced or restored on a no-net-loss basis in accordance with the applicable USACE and California Water Board mitigation standards in place at the time of construction.
- Before commencing any activity, including directional drilling, that may divert the natural flow or otherwise alter the Susan River or other stream resources, including riparian habitat associated with the Susan River, the applicant would notify CDFW through issuance of a Lake and Streambed Alteration Notification (notification). If CDFW determines, based on the notification, project activities trigger the need for a Lake and Streambed Alteration Agreement, the proponent would obtain an agreement from CDFW before the activity commences. The applicant would conduct project construction activities in accordance with the agreement, including implementing reasonable measures in the agreement necessary to protect fish and wildlife resources, when working within the bed or bank of waterways or in riparian habitats associated with those waterways. These measures may include demarcation of the construction area, biological monitoring, preparation of an inadvertent release (frac-out) contingency plan for directional drilling, erosion control, environmental awareness training for construction crews, and compensatory measures (e.g., restoration, long-term habitat management).

4.2 SENSITIVE NATURAL COMMUNITIES

4.2.1 Impact Analysis

Ashy ryegrass - Creeping wildrye turfs is a sensitive natural community identified in the study area within the mapped CWHR perennial grassland habitat. This vegetation alliance has a state rarity ranking of S3 and is therefore considered a sensitive natural community under CEQA. Project activities (i.e., ground disturbance, vegetation removal, staging) could result in direct loss of this sensitive natural community.

4.2.2 Recommendations

- Prior to implementation of project activities, a qualified biologist shall conduct protocol-level surveys to delineate sensitive natural communities within the project site following survey methods from CDFW's *Protocols for Surveying and Evaluating Impacts on Special-Status Native Plant Populations and Natural Communities* (CDFW 2018 or most recent version).

- If ashy ryegrass - creeping wildrye turfs sensitive natural community is not found on the project site, access routes, or staging areas, the biologist shall document the findings in a memo to the applicant and the City of Susanville, and no further mitigation would be required.
- If ashy ryegrass - creeping wildrye turfs sensitive natural community are found, the area occupied by this community shall be avoided completely, if feasible. This may include establishing a no-disturbance buffer around the vegetation community and demarcation of this buffer by a qualified biologist or botanist using flagging or high-visibility construction fencing. The size of the buffer shall be determined by the qualified biologist or botanist and shall be large enough to avoid direct or indirect impacts on the sensitive natural community.
- If ashy ryegrass - creeping wildrye turfs are found on the project site and cannot be avoided, the applicant would compensate for unavoidable losses to the sensitive natural community by:
  - restoring degraded ashy ryegrass - creeping wildrye turfs within the study area at a 1 to 1 ratio (1 acre restored for every acre lost as a result of project activities);
  - restoring degraded ashy ryegrass - creeping wildrye turf outside of the study area at a 1 to 1 ratio (1 acre restored for every acre lost as a result of project activities); or
  - preserving existing stands of ashy ryegrass - creeping wildrye turfs of equal or better value and equal acreage to those lost as a result of project activities through establishment of a conservation easement.

4.3 WILDLIFE CORRIDORS

4.3.1 Impact Analysis

The Susan River and its associated riparian habitat provide a movement corridor between its headwaters and Honey Lake. Susan River provides habitat for native fish species. The project will not alter Susan River or any associated riparian and wetland habitats, and fish and other aquatic species could still move through the area within the river corridor as they do under current (i.e., baseline) conditions. The proposed project would not create barriers to wildlife movement through the area and would not isolate or fragment any habitat areas; therefore, there would be no impact on wildlife movement or any established wildlife corridors.

4.3.2 Recommendations

No further actions are recommended.

4.4 SPECIAL-STATUS PLANTS

4.4.1 Impact Analysis

Nine special-status plants were initially determined to have potential to occur in the study area based on the presence of habitat suitable for the species (Table 3):

- Pulsifer's milk-vetch,
- Sheldon's sedge,
- ochre-flowered buckwheat,
- Plumas ivesia,
- Santa Lucia dwarf rush,
- long bluebells,
- Playa phacelia,
- sticky pyrrocoma, and
- winged dock.

However, as mentioned in Section 3.6, "Special-Status Species" of this report, no special-status plant species were observed during protocol-level botanical surveys, and these species are not expected to occur in the study area. As a result, the project is not expected to have impacts on special-status plants.

4.4.2 Recommendations

No further actions are recommended.

4.5 SPECIAL-STATUS WILDLIFE AND OTHER NATIVE BIRDS

4.5.1 Impact Analysis

Bank swallow, a species listed as threatened under CESA, has been reported to nest on vertical banks of the Susan River within or near the study area. There is a CNDDB record of bank swallows at this location going back to 1973 and the occurrence was confirmed active in 2001 (CNDDB 2024). Numerous recent bank swallow observations have been recorded in eBird along this reach of the Susan River. Bank swallows nest in colonies in naturally eroding river and stream banks. They are migratory, spending winters in South America. Ten additional special-status wildlife species were determined to have potential to occur in the study area (Table 4):

- western bumble bee,
- Lahontan mountain sucker,
- northwestern pond turtle,
- bald eagle,
- loggerhead shrike,
- northern harrier,
- Swainson's hawk,
- tricolored blackbird,
- yellow warbler, and
- pallid Bat.

Although no project activities are planned in the Susan River corridor, noise, vibration, and visual stimuli created by project activities in the vicinity of bank swallow or tricolored blackbird nesting colonies could agitate parent birds, interrupting essential behaviors such as breeding, feeding, or brooding, resulting in loss of reproduction or nest failure, or could ultimately cause them to abandon their nests altogether resulting in death of chicks that have already hatched. Additionally, long-term operation of the travel stop could cause bank swallows and tricolored blackbirds to permanently abandon active nest sites near the project site, if any, which could ultimately lead to take. However, as mentioned in Section 3.6, "Special-Status Species" of this report, no bank swallows or tricolored blackbirds were observed within the project boundaries during the 2025 nesting bird surveys and these species are not expected to occur in the study area. As a result, the project is not expected to have impacts on these three species. Swainson's hawks may forage on the project site; however, the project site does not contain trees suitable for nesting Swainson's hawks, and no Swainson's hawk nests were observed in the 0.5-mile study area buffer during the 2025 nesting bird surveys.

In addition to special-status birds, native birds and raptors protected by California Fish and Game Code and the federal MBTA may also nest on or near the project site. Project activities (i.e., vegetation clearing, ground disturbance, staging, heavy equipment use) may result in direct loss of special-status wildlife species, loss of or disturbance to nests or dens, or disturbance leading to abandonment of active nests or dens and mortality of dependent young.

No project activities are proposed within the Susan River corridor, as a result, the project is not expected to have impacts on Lahontan mountain sucker. The project activities do not include removal of any trees, structures, or any other potential roosting sites for bats, as a result, this project is not expected to have any impacts on pallid bat.

4.5.2 Recommendations

Conduct Focused Surveys for Special-Status Birds, Nesting Raptors, and Other Native Nesting Birds and Implement Protective Buffers

- To minimize the potential for loss of special-status bird species, raptors, and other native birds, project activities (e.g., tree removal, vegetation clearing, ground disturbance, staging) should be conducted during the nonbreeding season (approximately September 1-January 31, as determined by a qualified biologist), if feasible. If project activities are conducted during the nonbreeding season, no further mitigation would be required.
- Within 14 days before the onset of any project activities to be implemented during the breeding season (approximately February 1 through August 31, as determined by a qualified biologist), a qualified biologist familiar with the birds of California and with experience conducting nesting bird surveys will conduct focused surveys for special-status birds, other nesting raptors, and other native bird nests. Surveys shall be conducted in accessible areas within 0.25 mile of the project site for bald eagles, golden eagles, and Swainson's hawks, within 500 feet of the project site for other raptor species and special-status birds, and within 50 feet of the project site for non-raptor common native bird nests.
- If no active nests are found, the qualified biologist shall submit a memo documenting the survey methods and results to the applicant and the City of Susanville, and no further mitigation would be required.
- If active nests are found, impacts on nesting birds shall be avoided by establishing appropriate buffers around active nest sites identified during focused surveys to prevent disturbance to the nest. Project activity shall not commence within the buffer areas until a qualified biologist has determined that the young have fledged, the nest is no longer active, or reducing the buffer would not likely result in nest abandonment. Buffers typically would be 0.25 mile for bald eagle and golden eagle, and 500 feet for other raptors and special-status birds (e.g., bank swallow). Buffer size for non-raptor common bird species would be determined by a qualified biologist. Factors to be considered for determining buffer size would include presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and proposed project activities. Generally, buffer size for common bird nests would be at least 20 feet. The size of the buffer may be adjusted if a qualified biologist determines that such an adjustment would not be likely to adversely affect the nest. Any buffer reduction for a special-status species would require consultation with CDFW and/or USFWS, depending on the species' status. Periodic monitoring of the nest by a qualified biologist during project activities would be required if the activity has potential to adversely affect the nest, the buffer has been reduced, or if birds within active nests are showing behavioral signs of agitation (e.g., standing up from a brooding position, flying off the nest) during project activities, as determined by the qualified biologist.
- Removal of bald eagle and golden eagle nests is prohibited regardless of the occupancy status under the federal Bald and Golden Eagle Protection Act. If bald eagle or golden eagle nests are found during focused surveys, then the nest would not be removed.

Conduct Focused Western Bumble Bee Survey and Establish Protective Buffers

- Within 14 days before commencement of project activities, a qualified wildlife biologist with familiarity with western bumble bee and experience using survey methods for the species would conduct focused surveys of habitat suitable for the species within the project site.
- If no western bumble bee is found, the qualified biologist would submit a memo documenting the survey methods and results to the applicant and the City of Susanville, and no further mitigation would be required.
- If western bumble bee is found, impacts to western bumble bee would be avoided by establishing exclusion zones around occupied nests and floral resources within 100 meters of nests during the breeding/flight season of April-August.

Conduct Focused Western Pond Turtle Survey and Establish Protective Buffers

- Within 14 days before commencement of project activities, a qualified wildlife biologist familiar with western pond turtle will conduct focused surveys for western pond turtle within upland nesting habitat areas suitable for the species.
- If western pond turtles are not found, the qualified biologist shall submit a memo summarizing the results of the survey to the applicant and the City of Susanville, and no further mitigation would be required.
- If a western pond turtle is found, flagging areas for avoidance, relocation of individual animals by a qualified wildlife biologist with a valid CDFW scientific collecting permit, and/or other measures recommended by a qualified biologist as necessary to avoid injury to or mortality of western pond turtles would be required.
- If a western pond turtle nest is found, impacts to the nest would be avoided by establishing exclusion zones around all active nests, the size of which would be determined by the qualified biologist. No project activities (e.g., vegetation removal, ground disturbance, staging, heavy equipment use) would occur within the exclusion zone until nesting activities are complete or the nest is abandoned, as confirmed by a qualified biologist. The qualified biologist would monitor each nest once per week to track the status of the nest and to determine when it is no longer occupied. When it is no longer occupied, project activities within the exclusion zone may occur.

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Appendix A

Photographs



Source: Photograph taken by Ascent in 2024.

Photo 1: Sagebrush habitat invaded by perennial pepperweed (*Lepidium latifolium*). Photo taken from northeast edge of study area looking south.



Source: Photograph taken by Ascent in 2024.

Photo 2: Annual grassland habitat dominated by cheatgrass (*Bromus tectorum*). Photo taken from northwest of the project site in the study area looking south.



Source: Photograph taken by Ascent in 2024.

Photo 3: Perennial pepperweed habitat on the project site. Photo taken from southwest corner of the project site looking east.



Source: Photograph taken by Ascent in 2024.

Photo 4: Perennial pepperweed habitat with beardless wild rye (*Elymus triticoides*) in the study area. Photo taken from northwest area of the project site looking west.



Source: Photograph taken by Ascent in 2024.

Photo 5: Riparian habitat on the northern edge of the study area. Photo taken from northern edge of the study area looking west.



Source: Photograph taken by Ascent in 2024.

Photo 6: Perennial pepperweed habitat monoculture on the project site. Photo taken from northwest corner of the project site looking east.

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Appendix B

Botanical Survey Plant List

Table B-1 Botanical Survey Plant List

Scientific Name	Family	Status
Achillea millefolium	Asteraceae	Native
Acmispon americanus var. americanus	Fabaceae	Native
Aegilops cylindrica	Poaceae	Nonnative
Agropyron cristatum	Poaceae	Nonnative
Alisma triviale	Alismataceae	Native
Amaranthus albus	Amaranthaceae	Nonnative
Ambrosia acanthicarpa	Asteraceae	Native
Amsinckia menziesii	Boraginaceae	Native
Artemisia douglasiana	Asteraceae	Native
Artemisia tridentata	Asteraceae	Native
Asclepias fascicularis	Apocynaceae	Native
Asclepias speciosa	Apocynaceae	Native
Asparagus officinalis	Asparagaceae	Nonnative
Atriplex micrantha	Chenopodiaceae	Nonnative
Bassia hyssopifolia	Chenopodiaceae	Nonnative
Bassia scoparia	Chenopodiaceae	Nonnative
Berberis aquifolium	Berberidaceae	Native
Bromus inermis	Poaceae	Nonnative
Bromus japonicus	Poaceae	Nonnative
Bromus tectorum	Poaceae	Nonnative
Centaurea solstitialis	Asteraceae	Nonnative
Centaurea stoebe	Asteraceae	Nonnative
Chenopodium album	Chenopodiaceae	Nonnative
Chenopodium sp.	Chenopodiaceae	—
Chorispora tenella	Brassicaceae	Nonnative
Cichorium intybus	Asteraceae	Nonnative
Cirsium arvense	Asteraceae	Nonnative
Cirsium vulgare	Asteraceae	Nonnative
Conium maculatum	Apiaceae	Nonnative
Cotinus coggygri	Anacardiaceae	Nonnative
Deschampsia danthonioides	Poaceae	Native
Descurainia sophia	Brassicaceae	Nonnative
Distichlis spicata	Poaceae	Native
Elymus caput-medusae	Poaceae	Nonnative
Elymus cinereus	Poaceae	Native
Elymus elymoides	Poaceae	Native
Elymus hispidus	Poaceae	Nonnative

Scientific Name	Family	Status
Elymus ponticus	Poaceae	Nonnative
Elymus spicatus	Poaceae	Native
Elymus trachycaulus	Poaceae	Native
Elymus triticoides	Poaceae	Native
Epilobium brachycarpum	Onagraceae	Native
Equisetum arvense	Equisetaceae	Native
Equisetum laevigatum	Equisetaceae	Native
Ericameria nauseosa	Asteraceae	Native
Eriogonum vimineum	Polygonaceae	Native
Eriophyllum lanatum	Asteraceae	Native
Erodium cicutarium	Geraniaceae	Nonnative
Eschscholzia californica	Papaveraceae	Native
Euthamia occidentalis	Asteraceae	Native
Galium sp.	Rubiaceae	—
Gnaphalium palustre	Asteraceae	Native
Helianthus annuus	Asteraceae	Native
Hordeum brachyantherum	Poaceae	Native
Hordeum jubatum	Poaceae	Native
Hordeum murinum	Poaceae	Nonnative
Hosackia oblongifolia var. oblongifolia	Fabaceae	Native
Iva axillaris	Asteraceae	Native
Juncus balticus	Juncaceae	Native
Juniperus communis	Cupressaceae	Native
Lactuca serriola	Asteraceae	Nonnative
Lagophylla ramosissima	Asteraceae	Native
Lepidium latifolium	Brassicaceae	Nonnative
Lepidium perfoliatum	Brassicaceae	Nonnative
Lotus corniculatus	Fabaceae	Nonnative
Lycium barbarum	Solanaceae	Nonnative
Malva neglecta	Malvaceae	Nonnative
Matricaria discoidea	Asteraceae	Nonnative
Medicago lupulina	Fabaceae	Native
Medicago sativa	Fabaceae	Nonnative
Melilotus albus	Fabaceae	Nonnative
Melilotus officinalis	Fabaceae	Nonnative
Mentzelia laevicaulis	Loasaceae	Native
Nicotiana attenuata	Solanaceae	Native
Onopordum acanthium subsp. acanthium	Asteraceae	Nonnative

Scientific Name	Family	Status
Parthenocissus quinquefolia	Vitaceae	Nonnative
Phalaris arundinacea	Poaceae	Native
Poa annua	Poaceae	Nonnative
Poa bulbosa	Poaceae	Nonnative
Poa pratensis	Poaceae	Nonnative
Poa secunda	Poaceae	Native
Polygonum aviculare	Polygonaceae	Nonnative
Polypogon monspeliensis	Poaceae	Nonnative
Populus fremontii	Salicaceae	Nonnative
Portulaca oleracea	Portulacaceae	Nonnative
Prunus virginiana var. demissa	Rosaceae	Native
Pseudoroegneria spicata	Poaceae	Nonnative
Psilocarphus brevissimus	Asteraceae	Native
Purshia tridentata	Rosaceae	Native
Purshia tridentata	Rosaceae	Native
Ranunculus testiculatus	Ranunculaceae	Nonnative
Ratibida columnifera	Asteraceae	Nonnative
Ribes aureum	Grossulariaceae	Native
Ribes cereum	Grossulariaceae	Native
Robinia pseudoacacia	Fabaceae	Nonnative
Rosa woodsii	Rosaceae	Native
Rumex crispus	Polygonaceae	Nonnative
Rumex salicifolius	Polygonaceae	Native
Salix exigua	Salicaceae	Native
Salsola tragus	Chenopodiaceae	Nonnative
Sarcobatus vermiculatus	Sarcobataceae	Native
Schoenoplectus acutus var. occidentalis	Cyperaceae	Native
Secale cereale	Poaceae	Nonnative
Senecio sp.	Asteraceae	—
Sisymbrium altissimum	Brassicaceae	Nonnative
Sonchus asper	Asteraceae	Nonnative
Taraxacum officinale	Asteraceae	Nonnative
Taraxia tanacetifolia	Onagraceae	Native
Thlaspi arvense	Brassicaceae	Nonnative
Toxicoscordion paniculatum	Melanthiaceae	Native
Tragopogon dubius	Asteraceae	Nonnative
Tribulus terrestris	Zygophyllaceae	Nonnative
Typha latifolia	Typhaceae	Native

Scientific Name	Family	Status
Ulmus pumila	Ulmaceae	Nonnative
Urtica gracilis	Urticaceae	Native
Verbascum thapsus	Scrophulariaceae	Nonnative
Xanthium strumarium	Asteraceae	Native

Source: Data compiled by Ascent in 2025.

Appendix C

Special-Status Bird Survey Memo

Memo

455 Capitol Mall, Suite 300
Sacramento, CA 95814
916.444.7301

Date: August 26, 2025

To: Aaron Oliver, PE, QSD, Lane Engineers Inc.

From: Carlos Alvarado, Senior Biologist, Ascent

Subject 2025 Special-Status Bird Surveys, Susanville Travel Stop Project, Susanville, CA

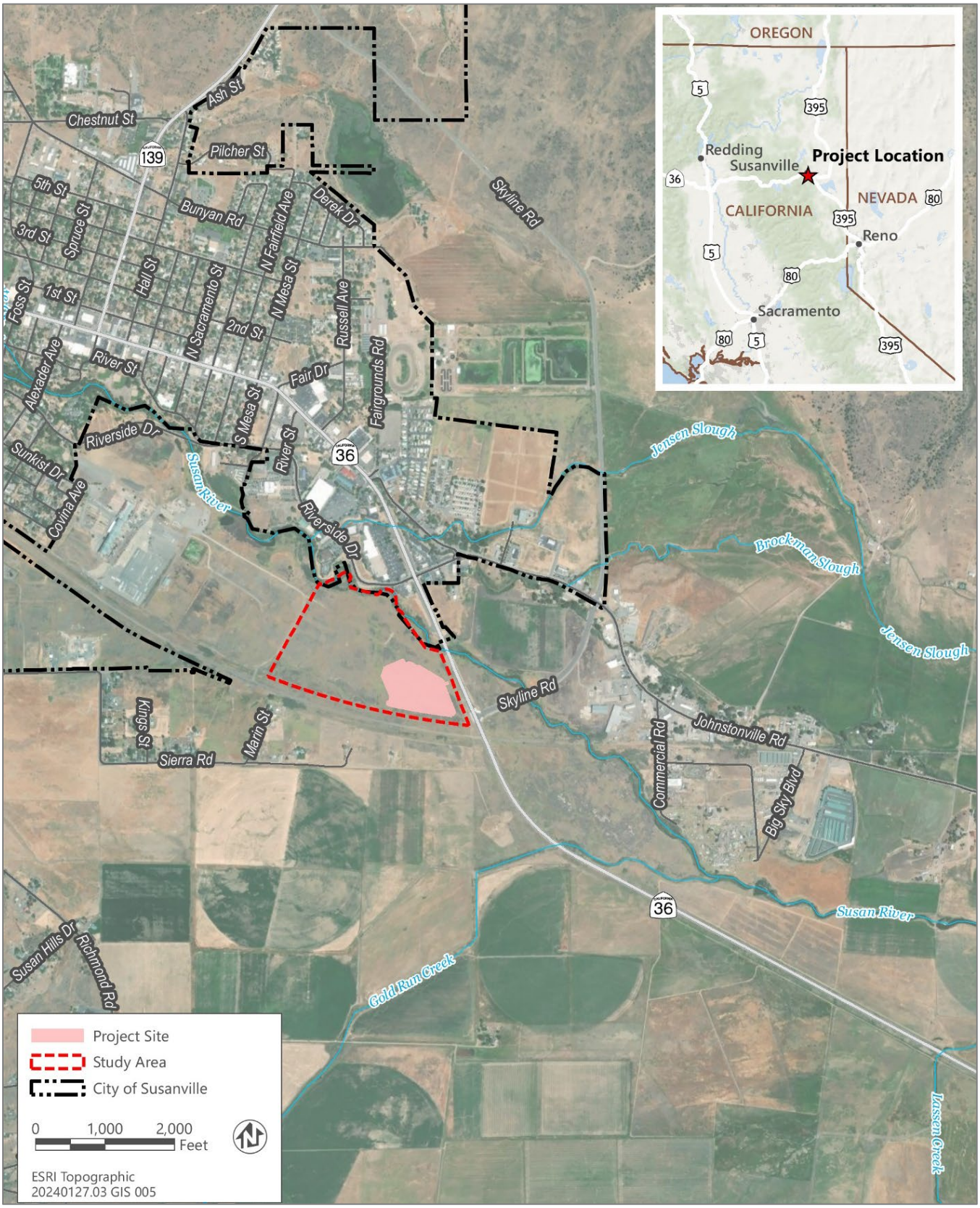
Lane Engineers, Inc (applicant) is proposing to construct for operation a full-service travel stop (project) on approximately 14.1 acres of vacant land to the southeast of the City of Susanville (project site) approximately 4.5 miles northwest of unincorporated community of Johnstonville and 82 miles northwest of Reno (Figure 1). The project site is in an unincorporated area of Lassen County that is proposed for annexation into the City of Susanville in the City of Susanville General Plan. The project site is part of a larger 79.6-acre parcel (Assessor's Parcel Number [APN] 107-280-017), located immediately south of Susanville city limits and west of State Route (SR) 36 (Figure 2), although the remainder of the parcel would remain undeveloped. The City of Susanville is located along the Susan River in the southern part of Lassen County, California, at the head of Honey Lake Valley. .

Based on biological investigations conducted for the initial study, bank swallows (*Riparia riparia*) are known to nest on the banks of the Susan River in the project vicinity and tricolored blackbirds (*Ageleaius tricolor*) have potential to nest in riparian habitat near the project site. Bank swallows and tricolored blackbirds nest in colonies on river and stream banks and recent observations of these species have been recorded near the project site (CNDDB 2025; eBird 2025). Swainson's hawks (*Buteo swainsoni*) may nest in large trees near the project site. Bank swallow, tricolored blackbird, and Swainson's hawk are listed as threatened species under the California Endangered Species Act (CESA) and noise, vibration, and visual stimuli created by project activities and operation in the vicinity of nest sites could cause nest abandonment, which would require a CESA Section 2081 take permit from the California Department of Fish and Wildlife (CDFW). The applicant requested that Ascent biologists conduct breeding season surveys in 2025 to examine bank swallow, tricolored blackbird, and Swainson's hawk use of the area including and surrounding the project site and potential off-site utility and roadway improvement areas. The study area for special-status bird surveys consists of the project site and potential off-site improvement areas plus a 500-foot buffer for bank swallow, a 0.5-mile buffer for Swainson's hawk, and 1.5-mile buffer for tricolored blackbird (Figure 3).



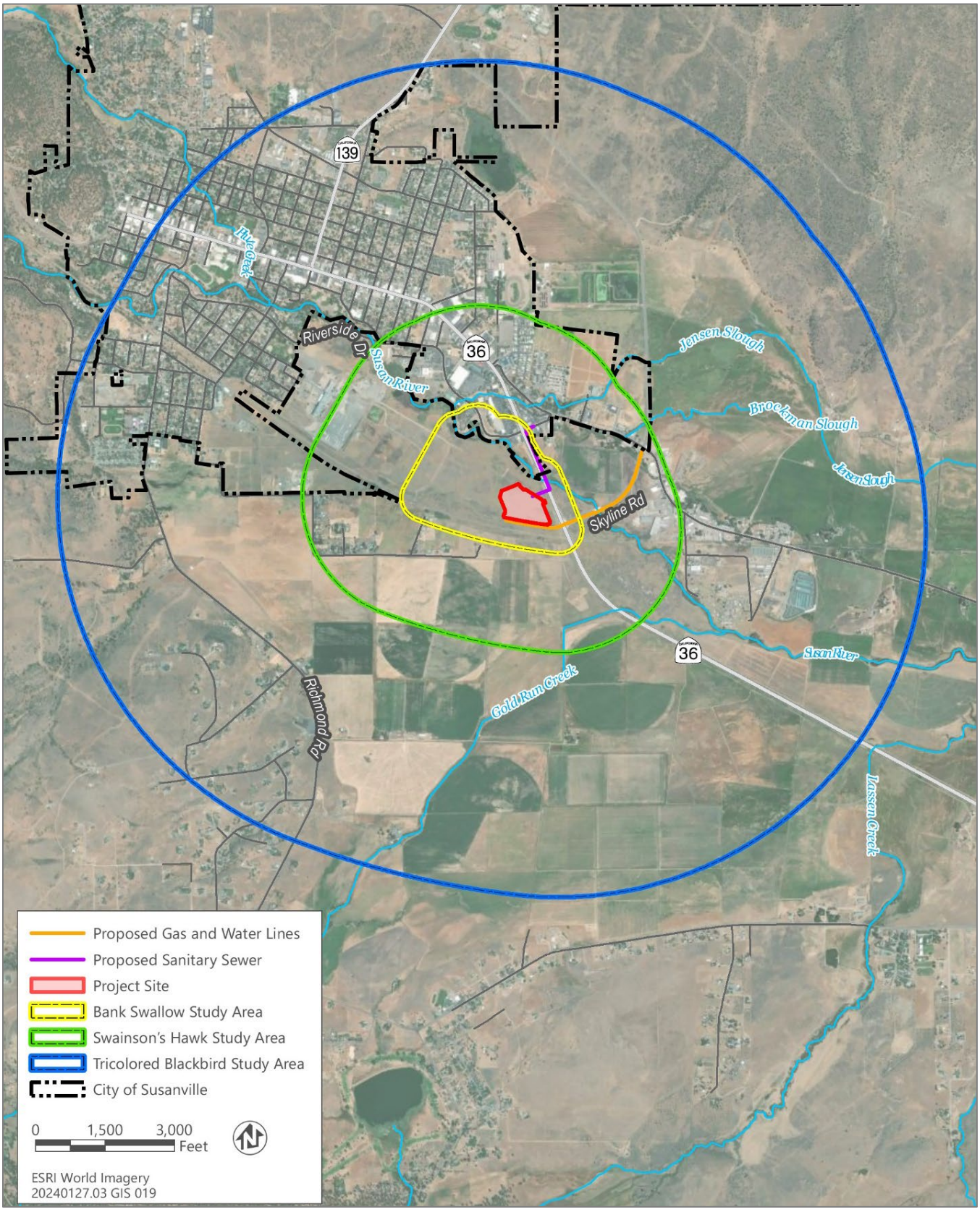
Source: Adapted by Ascent in 2024.

Figure 1 Regional Vicinity



Source: Adapted by Ascent in 2024.

Figure 2 Study Area Vicinity



Source: Adapted by Ascent in 2025.

Figure 3 Nesting Bird Survey Area

METHODS

Ascent wildlife biologists Carlos Alvarado and Nick Kryshak conducted three focused surveys for tricolored blackbirds, bank swallows, and Swainson's hawks at and surrounding the project site on April 21-22, May 11-12, and June 2-3, 2025. The survey buffers included areas within 1.5 miles of the project site and off-site improvement areas for tricolored blackbirds, areas within 500 feet for bank swallows, and those within 0.5 miles for Swainson's hawk (study area). Surveyors used binoculars and a spotting scope to scan the area and listened for bird vocalizations. Potential foraging and nesting areas were determined prior to field surveys using aerial imagery, and occurrence data from eBird, iNaturalist (a citizen scientist database), and the California Natural Diversity Database (CNDDB) (eBird 2025; iNaturalist 2025; CNDDB 2025). Due to constraints in accessing private property, the surveys focused on potentially suitable habitat at the project site and several additional locations where target species had been previously reported but used binoculars and the spotting scope to assess and survey inaccessible areas for target species.

Tricolored blackbird surveys were conducted in accordance with the methods described in *Tricolored Blackbird Survey Methods* (Airola et al 2024). Surveys for bank swallows were conducted following the methods described in *The California Department of Fish and Wildlife Statewide Bank Swallow Colony Inventory Survey Methods* (McFarland and Kozlowski 2021). Swainson's hawk surveys followed the guidelines provided by the Swainson's Hawk Technical Advisory Committee (TAC) 2000 within Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys for the California Central Valley. Bank swallow and Swainson's hawk surveys were conducted concurrently with the tricolored blackbird surveys. When proximate to the study area or site visit travel routes, known locations of the target species were visited as reference sites to inform species identification and seasonal behavior.

RESULTS

Landcover within the project site and off-site improvement areas include annual and perennial grassland, sagebrush, montane riparian, willow riparian, Fremont cottonwood riparian, riverine, alkali desert scrub, barren. Landcover types within the study area include urban, rural residential, annual grassland, perennial grassland, sagebrush, montane riparian, willow riparian, riverine, agricultural.

There are no trees on the project site that could provide nesting habitat suitable for raptor species.

No tricolored blackbirds or bank swallows were observed within the study area. A pair of Swainson's hawks were observed soaring over the study area on the morning of June 3, 2025; however, no Swainson's hawk nests were identified, and the species was not observed during the earlier April and May 2025 surveys. More detailed results for each of the three target species, as well as the results of reference site visits, are included below.

Tricolored Blackbird

Study Area

No tricolored blackbirds were observed in the study area during the April, May, or June surveys.

Reference Sites

Three male tricolored blackbirds were observed on the mornings of April 22, 2025, and again on May 12, 2025, approximately 4.5 miles east of the project site at the stock pond on Farris Ranch (708-725 Highway 395, E Susanville, CA 96130-8950). No tricolored blackbirds were identified on the morning of June 3, 2025. Although no female tricolored blackbirds or nests were observed, the April and May observation dates are consistent with the expected breeding season for the species, and if young were present, they may have fledged prior to the June survey.



Source: Ascent 2025

Figure 3 Male tricolored blackbirds at the Farris Ranch stock pond, approximately 4.5 miles east of the project site, on the morning of April 22, 2025.

Bank Swallow

Study Area

No bank swallows were identified during the April, May, or June surveys. During the surveys, Ascent biologists observed habitat areas suitable for bank swallow nesting along the Susan River approximately 1,500 feet from the project site where bank swallows had been reported in June 2001 (CNDDB 2025). Erosion of the bank, due to high water events, along the Susan River have reduced the available nesting habitat for bank swallows. No bank swallows were observed at the location; however, approximately seven pairs of northern rough-winged swallows (*Stelgidopteryx ruficollis*) were observed using bank cavities suitable for bank swallows (Figure 4). During the June 2025 survey, northern rough-winged swallows were observed making prey deliveries to their young occupying the cavities. Northern rough-winged swallows are a similar looking species to bank swallows, and the two species are both known to use burrows in banks and sandy cliffs as nesting sites. Northern rough-winged swallows do not excavate their own nests but may use nests previously excavated by bank swallows and the species are known to co-occur at nest sites (Thrune 1973). Northern rough-winged swallows are not protected under CESA and are generally considered common in California (Green 1999).



Source: Ascent 2025.

Figure 4 Northern rough-winged swallow entering nest cavity in the evening of April 21, 2025.



Source: Ascent 2025

Figure 5 Northern rough-winged swallow perched in front of nest cavity on the morning of April 22, 2025.

Reference Sites

Additional areas of potentially suitable habitat along the Susan River were observed during each of the three surveys, as well as the Susanville Sanitation District Wastewater Treatment Plant, approximately 0.6 miles north of the project site, where bank swallows have been previously reported in 2024 (eBird 2025). Bank swallows were also reported perching on utility wires along Mapes Road, approximately 16 miles east of the project site in April 2025 (eBird 2025). No bank swallows were observed at any of the reference sites visited.

Swainson's Hawk

Study Area

No Swainson's hawks were observed during the April or May surveys. A pair of Swainson's hawks were observed soaring over the study area on the morning of June 2, 2025, but were dispersed from the area by a red-tailed hawk.

Ten nest structures potentially suitable for Swainson's hawk were identified within the 0.5-mile buffer of the project site. One nest at the north end of King Street southwest of the project site was observed to be actively occupied by a red-tailed hawk in April (Figure 6). Red-tailed hawks were again observed in the area during the May and June surveys. An additional red-tailed hawk nest, with a single pre-fledged young, was observed during the June survey south of the United States Postal office on Johnstonville Road, northeast of the project site. The remaining eight nests appeared vacant during the three surveys; however, a red-shouldered hawk (*Buteo lineatus*) was observed in the proximity of one of these nests, and another was noted as being previously occupied by great-horned owls (*Bubo virginia*) by a local resident (*personal communication*). Additionally, two more of the potentially suitable nest structures were determined to be unlikely to be occupied by Swainson's hawks due to structural deficiencies (i.e., one likely too small, and one partially collapsed).



Source: Ascent 2025.

Figure 6 Nest occupied by a red-tailed hawk on the morning of April 22, 2025.

Reference Sites

Potential Swainson's hawk nests outside of the 0.5-mile buffer of the project site were observed by biologists. A nest structure potentially suitable for Swainson's hawks was identified approximately 2 miles outside of the study area and was actively occupied by an unidentified hawk species in the evening of April 21, 2025.

Raptors and potential nests outside of the study area were observed to identify species and occupancy. No Swainson's hawks were identified during the March survey, and one was observed during the April survey. In addition to the pair observed over the project site during the June survey, several additional Swainson's hawks were identified in flight; however, all these individuals were observed outside of the study area, and no occupied Swainson's hawk nests were identified.

Additional Wildlife Species

Study Area

Additional wildlife species observed in the study area include common species such as mule deer (*Odocoileus hemionus*), California quail (*Callipepla californica*) and killdeer (*Charadrius vociferus*). A colony of cliff swallows (*Petrochelidon pyrrhonota*) was observed beneath the bridge spanning the Susan River along Main Street between Riverside Drive and Skyline Road. Pacific chorus frogs (*Pseudacris regilla*) and tadpoles were observed in ponds, drainages, and wetland features, particularly those along the service road on the southern boundary of the project site. A full list of wildlife species observed in the study area is available in Table 1. Although special-status species were observed during surveys, no special-status species were observed within the study area. Species observed at reference sites but not within the study area (e.g., tricolored blackbird) are not included in Table 1.

CONCLUSIONS

No tricolored blackbirds or bank swallows were observed in the study area during any of the three site visits. Swainson's hawks were observed passing over the study area during only the June survey; however, were not found nesting or roosting within the study area. Additional species with comparable habitat requirements to tricolored blackbirds (e.g., red-winged blackbirds [*Agelaius phoeniceus*]), bank swallows (e.g., northern rough-winged swallows), and Swainson's hawks (e.g., red-tailed hawks) were observed in the study area and engaged in various territorial, nesting, and foraging activities. These observations support the conclusion that although the three target species were not observed, suitable habitat is present at and surrounding the project site. If project activities are scheduled during the nesting bird season (typically February through August), pre-construction surveys would be required, prior to the commencement of these activities as the site may become occupied by any of the three special-status bird species in subsequent nesting seasons. If nests are found and project activities cannot be avoided during the nesting season, a no-disturbance buffer around the nest will need to be established (size is dependent on species and other environmental factors) and construction monitoring may be required to prevent nest abandonment in and around the project site.

Table 1 Wildlife Species Observed During Special-Status Bird Surveys within the Study Area

Common Name	Scientific Name
American crow	*Corvus brachyrhynchos*
American kestrel	*Falco spaverius*
American robin	*Turdus migratorius*
Barn swallow	*Hirundo rustica*
Belted kingfisher	*Megaceryle alcyon*
Bewick's wren	*Thryomanes bewickii*

Common Name	Scientific Name
Black phoebe	*Sayornis nigricans*
Black-billed magpie	*Pica hudsonia*
Brewer's blackbird	*Euphagus cyanocephalus*
Bullock's oriole	*Icterus bullockii*
California ground squirrel	*Otospemophilus beecheyi*
California quail	*Callipepla californica*
California scrub jay	*Aphelocoma californica*
Common raven	*Corvus corax*
Downy woodpecker	*Dryobates pubescens*
Eurasian collared dove	*Streptopelia decaocto*
European starling	*Sturnus vulgaris*
Great blue heron	*Ardea herodias*
Great egret	*Ardea alba*
Great-tailed grackle	*Quiscalus mexicanus*
House sparrow	*Passer domesticus*
House finch	*Haemorhous mexicanus*
Killdeer	*Charadrius vociferus*
Lesser goldfinch	*Spinus psaltria*
Mallard	*Anas platyrhynchos*
Mourning dove	*Zenaida macroura*
Mule deer	*Odocoileus hemionus*
Northern flicker	*Calaptes auratus*
Northern harrier	*Circus hudsonius*
Northern rough-winged swallow	*Stelgidopteryx ruficollis*
Pacific chorus frog	*Pseudacris regilla*
Raccoon	*Procyon lotor*
Red-shouldered hawk	*Buteo lineatus*
Red-tailed hawk	*Buteo jamaicensis*
Red-winged blackbird	*Agelaius phoeniceus*
Ring-billed gull	*Larus delawarensis*
Rock pigeon	*Columba livia*
Song sparrow	*Melospiza melodia*
Spotted towhee	*Pipilo maculatus*
Tree swallow	*Tachycineta bicolor*
Turkey vulture	*Cathartes aura*
Western bluebird	*Sialia mexicana*
Western kingbird	*Tyrannus verticalis*

Common Name	Scientific Name
Western meadowlark	*Sturnella neglecta*
Western tiger swallowtail	*Papilio rutulus*
White-crowned sparrow	*Zonotrichia leucophrys*
White-faced ibis	*Plegadis chihi*
Yellow rumped warbler	*Setophaga coronata*

Source: Compiled by Ascent in 2025

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Appendix E

Aquatic Resources Delineation Report



AQUATIC RESOURCES DELINEATION REPORT FOR THE

Susanville Travel Stop Project

Prepared for:

City of Susanville

August, 2025

AQUATIC RESOURCES DELINEATION REPORT FOR THE

Susanville Travel Center Project

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20240127.03

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LIST OF ABBREVIATIONS

CDFW	California Department of Fish and Wildlife
CWA	Clean Water Act
EPA	US Environmental Protection Agency
FAC	facultative
FACW	facultative wetland
FACU	facultative upland
FGC	California Fish and Game Code
FGDC	Federal Geographic Data Committee
GIS	geographic information system
GPS	Global Positioning System
HGM	hydrogeomorphic
HUC	hydrologic unit code
LSAA	Lake or Streambed Alteration Agreement
NI	no indicator
NL	not listed
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
NWPL	National Wetland Plant List
NWPR	Navigable Waters Protection Rule
OBL	obligate
OHWM	ordinary high water mark
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
project	Susanville Travel Stop Project
project site	proposed 14.1-acre travel stop
RHA	Rivers and Harbors Act
RPW	relatively permanent water
RWQCB	Regional Water Quality Control Board
TNW	traditional navigable water
USACE	US Army Corps of Engineers
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
WMVC	Western Mountains, Valleys, and Coast

EXECUTIVE SUMMARY

Ascent Environmental conducted a delineation of aquatic resources within the study area for the Susanville Travel Stop Project (project) on April 7 and 8, 2025. The study area is comprised of the proposed 14.1-acre travel stop (project site) and potential off-site utilities and road improvements plus a 100-foot buffer of the utilities. The study area encompasses a total of approximately 90.74 acres. The US Army Corps of Engineers (USACE) 1987 *Wetlands Delineation Manual* (Environmental Laboratory 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Environmental Laboratory 2010) were used to delineate wetlands and other waters that are potentially subject to USACE jurisdiction under the Clean Water Act (CWA) as well as state of California regulations under the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (State Wetlands Procedures), and California Fish and Game Code (FGC) Section 1602. The delineation was also conducted in accordance with *National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams* (David et al. 2025). This report was prepared to support a request for a jurisdictional determination from the USACE Sacramento District (District) and conforms to the District's *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports* (USACE 2016a) and *Updated Map and Drawing Standards for the Pacific Division Regulatory Program Delineations* (USACE 2016b). This report provides necessary background information to support the preparation of permit applications under federal and state regulations related to aquatic resources.

A total of approximately 6.35 acres of aquatic resources, including wetlands, were documented in the study area. These aquatic resources consist of 0.64 acres of riverine lower perennial waters, 0.15 acres of riverine ephemeral waters, 4.37 acres of palustrine emergent wetlands, 0.78 acres of palustrine scrub-shrub wetlands, and 0.41 acres of palustrine open water wetlands.

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1 INTRODUCTION

This aquatic resources delineation report has been prepared to document the results and conclusions of an aquatic resources delineation and field survey conducted on April 7 and 8, 2025 for the Susanville Travel Stop (project). Ascent Environmental was authorized by the project applicant to conduct a delineation of aquatic resources in the project study area that may be subject to federal regulation under the Clean Water Act (CWA) as well as state of California regulations under the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), the State Wetlands Procedures, and California Fish and Game Code (FGC) Section 1602. The purpose of this report is to identify and describe aquatic resources in the study area that may be regulated under federal and/or state laws and regulations. This report facilitates efforts to:

1. Avoid or minimize impacts to aquatic resources during the design process.
2. Document aquatic resource boundary determinations for review by regulatory authorities.
3. Provide necessary background information to support required permit applications under said regulations.

The project applicant is proposing to construct for operation a full-service travel stop (project) on approximately 14.1 acres of vacant land that is currently in an unincorporated area of Lassen County but is proposed for annexation into the City of Susanville.

Lane Engineers, Inc. is the project proponent, and its primary contact for this project is Aaron Oliver. Contacts for information about this delineation report are:

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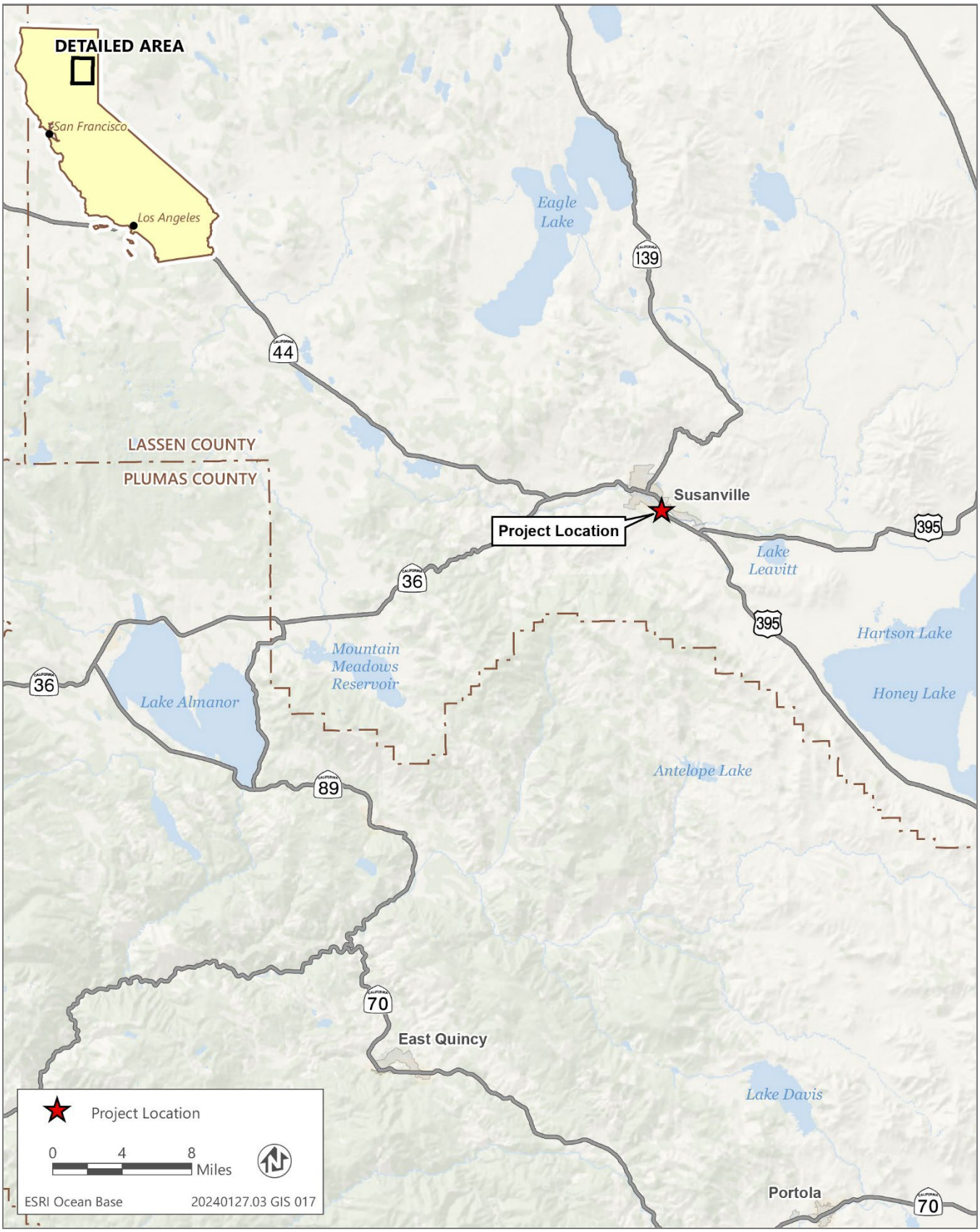
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2 LOCATION

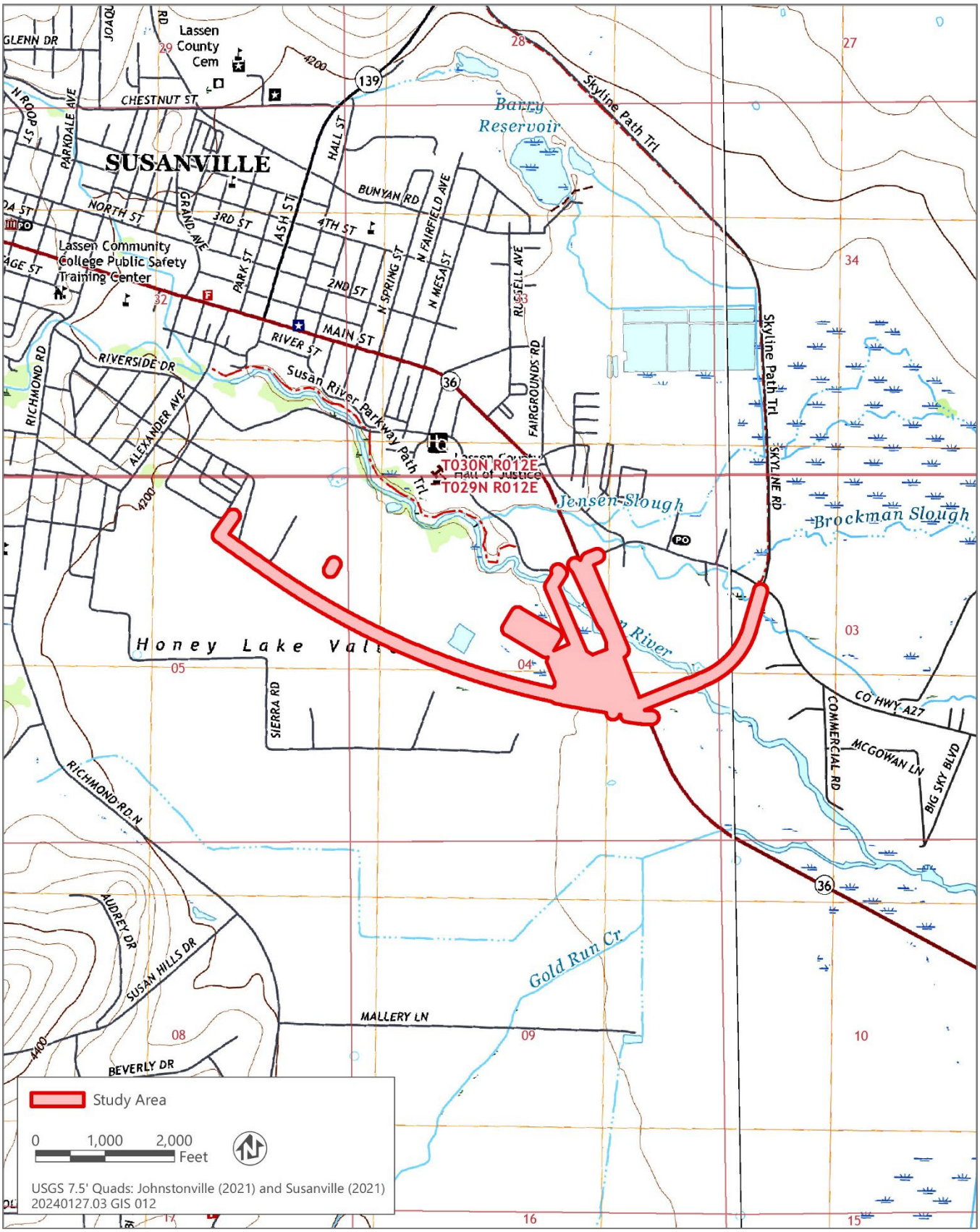
The project site consists of approximately 14.1 acres of vacant land to the southeast of the City of Susanville (project site). The City of Susanville is located on the Susan River in the southern part of Lassen County, California at the head of Honey Lake Valley. The City is located approximately 4.5 miles northwest of the unincorporated community of Johnstonville and 82 miles northwest of Reno (Figure 1). The project site is part of a larger 79.6-acre parcel (Assessor's Parcel Number [APN] 107-280-017), located immediately south of Susanville's city limits and west of State Route (SR) 36. In addition to the 14.1-acre project site, the project proposes to construct off-site improvements, such as utilities (gas, water, and sewer lines) and road extensions, to service the travel stop. Existing and future truck and vehicular traffic is expected to generate substantial demand for the proposed travel stop facilities and services as the City lies at the junction of SR 36 and SR 139. SR 36 is an east-west highway that begins at US Highway 101 near the California Coast. Near Susanville, the roadway serves as an important link between Redding and Red Bluff (via SR 36 and SR 44) to the west and Reno/North Lake Tahoe (via US Highway 395) to the south; and SR 139 heads north to the Oregon border as a direct route to Klamath Falls.

The study area for this delineation is comprised of the 14.1-acre project site plus potential off-site utilities and road improvements plus a 100-foot buffer of the utilities. The total size of the study area is approximately 90.74 acres and it is within the Susanville, California US Geological Survey (USGS) 7.5-minute quadrangle, within Sections 27 Township 29 North Range 12 East (Figure 2). The approximate centroid of the study area is 40.40315 120.63630. The project study area can be accessed via SR 36. From US Highway 395, take SR 36 to its intersection with Skyline Road.



Source: Adapted by Ascent in 2025.

Figure 1 Regional Vicinity



Source: Adapted by Ascent in 2025.

Figure 2 Topographic Map of Study Area

3 PROJECT DESCRIPTION

The proposed project includes a travel stop, which would provide professional truck drivers and motorists with 24-hour access to purchase gasoline, diesel, propane, electronics, snacks, travel items, and food from two fast-food restaurants, one with a drive through. A dog park, recreational vehicle (RV) dump station, bioretention basins, truck, RV and automobile parking areas and landscaping/lighting are also proposed, along with a 10-space overnight RV park. Project visitors/customers would include "over-the-road" trucks (i.e., professional long-haul drivers who are on the road for consecutive days or weeks at a time), traveling motorists, and residents. Primary access to the project site would be provided from SR 36 via an existing signalized intersection at SR 36 and Skyline Road but with a new dedicated exit lane southbound and a new northbound dedicated turn lane onto Skyline Road. Ingress/egress would be provided via two entry/exit points off Skyline Road, the first for RVs and automobiles and the second for trucks.

The proposed project would install storm drains and proposed project grading would also implement stormwater control/drainage and water quality features to prevent drainage and water quality impacts, which would include bioretention ponds and standard best management practices.

The project would install a variety of off-site improvements, including highway and street improvements and transitions, drainage facility connections, utility connections, and landscaping. The City of Susanville currently provides water and natural gas services to the city, the Susanville Sanitation District serves the city sewer, and electricity is provided by Lassen Municipal Utility District. Existing overhead electrical lines are located along Skyline Road and adjacent to SR 36 and would be relocated prior to construction and the project site would tie-in to these. Other utilities would generally be brought to the site via a trench within the outer limits of the City/Caltrans right-of-way. Utilities such as water and gas would be brought to the site from Johnstonville Road via Skyline Road, on the west side of the road. The gas and water lines would be trenched either side of the Susan River but would be pumped through a pipe that would be hung from the side of the bridge on Skyline Road over the Susan River.

The sewer line route would connect from the site at a point approximately 600 feet north from the SR 36/Riverside Drive intersection and would be bored under the Caltrans right-of-way from the west side of SR 36 to the east side of SR 36. The sewer would then be trenched either side of the Susan River but, with Caltrans permission and an encroachment permit in accordance with Caltrans standards, would be pumped through a pipe that would be hung from the eastern (downstream) side of the SR 36 bridge over the Susan River (Bridge 7-33), before tying in to the existing sanitary sewer manhole at the SR 36/Riverside Drive intersection. Per discussion between the City and the Susanville Sanitary District, upon finalization of sewer construction, the District would take ownership and operate the sewer line.

4 REGULATORY SETTING

The following discussion of jurisdictional parameters is provided for reference. The project proponent may request a preliminary jurisdictional determination (JD) rather than an approved JD in accordance with the USACE Regulatory Guidance Letter No. 08-02 (USACE 2008). Preliminary JDs are non-binding indications by USACE that there may be waters of the United States, including wetlands, on a parcel. A permit decision made based on a preliminary JD will treat all waters and wetlands identified as if they are jurisdictional waters of the United States. An approved JD is an official USACE determination that jurisdictional "waters of the United States," or "navigable waters of the United States," or both, are either present or absent on a particular site. An approved JD precisely identifies the limits of those waters on the project site determined to be jurisdictional under CWA. Jurisdictional determination of waters of the United States is at the discretion of USACE, and the agency may determine an approved JD is necessary even if the project proponent requests a preliminary JD.

4.1 FEDERAL JURISDICTION OF WETLANDS AND OTHER WATERS OF THE UNITED STATES

4.1.1 Section 404 of the Clean Water Act

Under Section 404 of the federal CWA, the US Environmental Protection Agency (EPA) and USACE have regulatory and permitting authority regarding discharge of dredged or fill material into waters of the United States. The definition of waters of the United States subject to federal jurisdiction and concomitant CWA permitting requirements is currently in flux due to agency and court interpretations of that term over the last couple decades. On August 29, 2023, USACE and EPA issued a revised definition of waters of the United States to conform to the US Supreme Court's May 25, 2023, decision in the case of *Sackett v. US Environmental Protection Agency*, which invalidated some aspects of the prior definition.

(a) Waters of the Unites States means:

1. Waters that are:
   (i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
   (ii) The territorial seas: or
   (iii) Interstate waters;
2. Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;
3. Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;
4. Wetlands adjacent to the following waters:
   (i) Waters identified in paragraph (a)(1) of this section; or
   (ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;
5. Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

(b) The following are not "waters of the United States" even where they otherwise meet the terms of paragraphs (a)(2) through (5) of this section:

1. Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirement of the Clean Water Act;
2. Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;
3. Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;
4. Artificially irrigated areas that would revert to dry land if the irrigation ceased;
5. Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;

6. Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;
7. Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and
8. Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.

The EPA and USACE define wetlands as "Those areas that are saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." USACE wetlands must typically exhibit three parameters: (1) wetland hydrology, (2) hydrophytic vegetation, and 3) hydric soils, to meet the federal definition.

4.2 STATE JURISDICTION OF WETLANDS AND WATERS OF THE STATE

The State Water Resources Control Board (SWRCB) and nine regional water quality control boards (RWQCBs) regulate activities in waters of the state, under the Porter-Cologne Act. Under the Porter-Cologne Act, all waters of the United States are also waters of the state; however, waters disclaimed by USACE may also be regulated as waters of the state, which are defined under the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state."

In April 2019, the SWRCB adopted the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (State Procedures). The State Procedures went into effect May 28, 2020, and consist of four major elements: 1) a wetland definition; 2) wetland delineation procedures; 3) a framework for determining if a feature that meets the wetland definition is a water of the state; and 4) procedures for the submittal, review, and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities. The State Procedures are intended to protect and enhance the quantity, quality, and diversity of wetlands that qualify as waters of the state and improve consistency in wetland regulation and management within California. Under the state definition, an area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater or shallow surface water or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The primary difference between the state definition of a wetland and the federal definition is that the federal definition requires that an area have at least 5 percent areal coverage of plants at the peak of the growing season to be considered a wetland, whereas, under the State definition, lack of vegetation does not preclude an area from being a wetland. The area must still support hydric soils and wetland hydrology and if vegetation is present, it must be dominated by hydrophytes (i.e., wetland plants) even if aerial cover is less than 5 percent. Waters that would be considered wetlands under the State definition and Procedures, but not by the federal wetland definition, consist of wetlands characterized by exposed bare substrates such as mudflats and playas.

Another difference between the state and federal wetland definitions relates to soil conditions. The federal wetland definition refers to "saturated soil conditions," whereas the state's definition refers to saturated substrate leading to "anaerobic conditions in the upper substrate." This is a more inclusive term as it includes material that may be on top of the soil, such as layers of decomposing plant material, that technically are not part of the soil. Additionally, to be a state wetland, the wetland need not be hydrologically connected or adjacent to another water of the state.

The State Procedures utilize existing USACE tools for delineation of wetlands, for example directing that delineations of wetland waters of the State shall follow the methods set forth in the wetlands delineation manual (Environmental Laboratory 1987) and applicable regional supplement (i.e., the Arid West supplement or Western Mountains, Valleys, and Coasts supplement). However, if there is a conflict between these federal methods and the State Procedures, the State Board directs that the State Procedures will be used.

Waters of the state include the following:

1. Natural wetlands;
2. Wetlands created by modification of a surface water of the state; and
3. Artificial wetlands that meet any of the following criteria:
    a. Approved by an agency as compensatory mitigation for impacts to waters of the state except where the approving agency explicitly identifies the mitigation as being of limited duration;
    b. Specifically identified in a water quality control plan as a wetland or other water of the state,
    c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
    d. Greater than or equal to 1 acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., these are not waters of the state unless they also satisfy criteria 2, 3a, or 3b):
        i. Industrial or municipal wastewater treatment or disposal,
        ii. settling of sediment
        iii. detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,
        iv. treatment of surface waters,
        v. agricultural crop irrigation or stock watering,
        vi. fire suppression,
        vii. industrial processing or cooling,
        viii. active surface mining- even if the site is managed for interim wetlands functions and values,
        ix. log storage,
        x. treatment, storage, or distribution of recycled water, or
        xi. maximizing groundwater recharge (not including wetlands that have incidental groundwater recharge benefits); or
        xii. fields flooded for rice growing.

The State Procedures exclude artificially irrigated areas that would revert to dry land if irrigation stopped, lakes and ponds that were constructed in dry land, and prior converted cropland, and the following ditches:

- Ditches with ephemeral flow that are not a relocated water of the state or excavated in a water of the state;
- Ditches with intermittent flow that are not a relocated water of the State or excavated in a water of the state or that do not drain wetlands; and
- Ditches that do not flow directly from or through another water into another water of the state.

Additionally, RWQCB regulates discharges of fill and dredged material under section 401 of the CWA and the Porter-Cologne Act through the State Water Quality Certification Program. The State Water Quality Certification Program regulates proposed federally permitted activity which may result in a discharge to water bodies, including discharges of dredged or fill material permitted by the USACE under section 404 of the CWA (e.g., navigational dredging; flood control channelization; levee construction; channel clearing; and fill of wetlands or other water bodies for land development), and ensures consistency with the CWA, California Environmental Quality Act, California Endangered Species Act, and the Porter-Cologne Act.

The Lahontan RWQCB has jurisdiction over waters in the study area. Because waters of the state are defined more broadly than waters of the United States, projects that do not require a federal permit may still result in dredge or fill of waters of the state. Such projects may be regulated by the RWQCB under waste discharge requirements or certifications of waste discharge requirements. State and Regional Water Quality Control Boards will rely on aquatic resources delineation reports prepared for and verified by USACE for determining the initial extent of wetland waters of the state during review of applications for water quality certification or waste discharge requirements. However, if there are aquatic resources within the project boundary that are not waters of the United States (i.e., do not meet the federal definition of waters or wetlands) they must be included on a map provided with the application and they will be verified by RWQCB during application review.

4.2.1 Fish and Game Code Section 1602

Pursuant to Division 2, Chapter 6, Section 1600 et seq. of FGC, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream, or lake that supports fish or wildlife. A notification of a Lake and Streambed Alteration must be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river lake or stream." In addition, CDFW has authority under FGC 1600 et seq. over wetland and riparian habitats associated with lakes and streams. The removal or treatment of vegetation from the bed or banks of lake and stream features is considered a substantial change and is regulated under Section 1602. CDFW reviews proposed projects, and if necessary, submits to the applicant a proposal that includes measures to protect affected fish and wildlife resources during project implementation. The final proposal that is mutually agreed upon by CDFW and the project proponent is called a lake and streambed alteration agreement. Such an agreement is not a permit, but rather a mutual accord between CDFW and a project proponent. Because CDFW includes under its regulatory authority streamside habitats and activities within any watershed that may affect lake and stream habitat that supports fish and wildlife resources, CDFW regulatory authority may be broader than USACE or RWQCB jurisdiction.

5 METHODS

A field delineation of aquatic resources was conducted following US Army Corps of Engineers (USACE) 1987 Wetlands Delineation Manual (Environmental Laboratory 1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Environmental Laboratory 2010) and State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (State Wetlands Procedures) to identify wetlands and other waters that are potentially subject to USACE jurisdiction under CWA as well as state of California regulations under the Porter-Cologne Act. The delineation was also conducted in accordance with National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams (David et al. 2025).

5.1 PRE-FIELD REVIEW

Prior to conducting the field investigation, Ascent wetland ecologists reviewed the following data sources:

- Google Earth aerial imagery of the study area for vegetative, topographic, and hydrographic signatures (Google Earth 2025) (historic aerial photographs from 1985–2023 were reviewed as well as current 2025 aerial photographs);
- Custom Soil Resource Report for Susanville Area, Parts of Lassen and Plumas Counties, for information about soils and geomorphology (NRCS 2024);
- California Aquatic Resources Inventory (CWMW 2024);
- National Wetlands Inventory (US Department of the Interior 2024); and
- Western Mountains, Valleys, and Coast Regional Wetland Plant List (USACE 2020).

5.2 FIELD SURVEY METHODS

Before conducting the field delineation of the study area, an Ascent wetland ecologist reviewed the resources listed above to identify areas that may support aquatic resources of potential federal and state jurisdiction. Areas showing evidence of wetland and/or drainage signatures were investigated within the delineation study area. The field delineation was conducted in the study area on April 7 and 8, 2025, by Ascent wetland ecologists Tammie Beyerl and Shannon Hickey. Potentially jurisdictional features were mapped and jurisdictional determination data forms were completed during this delineation field survey.

5.2.1 Data Collection

The Wetlands Delineation Manual (Environmental Laboratory 1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast (WMVC) Region (Environmental Laboratory 2010) were used to delineate wetlands that are potentially subject to USACE jurisdiction under Section 404 of the CWA. The 1987 Manual and 2010 WMVC Supplement provide technical guidelines and methods for the three-parameter approach to determining the location and boundaries of jurisdictional wetlands. This approach requires that an area support positive indicators of hydrophytic vegetation, hydric soils, and wetland hydrology to be considered a jurisdictional wetland. Routine jurisdictional determination data forms were completed for seven sample points during the survey and are provided in Appendix A.

5.2.2 Determination of Hydrophytic Vegetation

To determine whether the area at a sample point was dominated by hydrophytic vegetation, plant species at each sample site were identified and the wetland indicator status was recorded for the dominant species using USACE's National Wetlands Plant List for the Western Mountains, Valleys, and Coast Region (USACE 2024). A species is considered dominant when that species—individually or collectively—accounts for 50 percent of the total absolute cover in a vegetation stratum. Additional codominant species are identified if those species account for at least 20 percent of the absolute cover in a designated vegetation stratum (Environmental Laboratory 2010).

Hydrophytic species include those listed as obligate (OBL), facultative wetland (FACW), or facultative (FAC) species, which correspond to a given species frequency of occurrence in wetlands (Table 1). Per delineation protocol, a sample site was considered to have hydrophytic vegetation if greater than 50 percent of the dominant species had an indicator status of FAC or wetter. Plants were identified to species using The Jepson Manual: Vascular Plants of California (Second Edition) (Baldwin et al., 2012) as revised by the Jepson eFlora (Jepson Flora Project 2024). The National Wetland Plant List (USACE 2024) was used to determine the wetland indicator status of all plants.

Table 1 Indicator Status Rating Definitions

Wetland Indicator Status Rating	Abbreviation	Definition*
Obligate	OBL	Almost always occur in wetlands.
Facultative Wetland	FACW	Usually occur in wetlands but may occur in non-wetlands.
Facultative	FAC	Occur in wetlands and non-wetlands
Facultative Upland	FACU	Usually occur in non-wetlands but may occur in wetlands.
Upland	UPL	Almost always occur in non-wetlands.
No Indicator	NI	Insufficient information was available to determine an indicator status.

* These category definitions were updated in 2020. They are qualitative descriptions that reflect the qualitative supporting information, rather than numeric frequency ranges. The percentage frequency categories used in the older definitions are now mostly used for testing problematic or contested species being recommended for indicator status changes.

5.2.3 Determination of Hydric Soils

The Web Soil Survey Report for Susanville Area, Parts of Lassen and Plumas Counties, California (NRCS 2025) was consulted to identify soil units mapped in the study area by NRCS and determine if any of the mapped soil units are listed as hydric. Soils were examined by digging soil test pits to determine whether hydric soils exist in a sampling location. Soils were described in terms of depth, matrix color, moisture status, and other diagnostic features indicative of hydric soils, such as the presence of concentrations, depletions, and other redoximorphic features. Hydric soil indicators were based on those provided in the 1987 USACE manual, 2010 regional supplement, and *Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils* (NRCS 2017).

5.2.4 Determination of Wetland Hydrology

Wetland hydrology was assessed by recording observations such as surface water, high water table, saturation, and saturation/inundation visible on aerial imagery. In addition, the potentially jurisdictional areas were all evaluated in terms of their status as a navigable waterway or their hydrological connection to a navigable waterway.

5.2.5 Determination of Ordinary High Water Mark

Other waters of the United States were delineated based on the OHWM, which is defined as the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in soil characteristics, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means. The OHWM of the Susan River was determined using the National OHWM Field Delineation Manual for Rivers and Streams (David et al. 2025). A stream feature's OHWM is consistently associated with some combination of three primary indicators – a topographic break in slope, change in vegetation characteristics, and change in sediment characteristics – that express the signature of the active channel. OHWM data forms were completed and are provided in Appendix B.

5.3 MAPPING AND ACREAGE CALCULATIONS

All features, including wetland sample points, wetland boundaries, OHWM intervals, and stream channel courses were recorded using a Global Positioning System (GPS) with sub-meter accuracy. All sample point locations were also recorded using an Eos Arrow 100 GPS unit. In the office, GPS data were downloaded and aquatic features mapped using Geographic Information System (GIS) software (ArcGIS Pro) on an overlay of both topography and geo-referenced aerial photography. Acreages of aquatic resources polygons and the length of linear features were determined using ArcGIS.

6 EXISTING CONDITIONS

6.1 LANDSCAPE SETTING

The study area is along the Susan River in the southern part of Lassen County, California at the head of Honey Lake Valley. It is within the Northwestern Basin and Range USDA Ecoregion of California and within the Modoc Plateau Floristic Subregion of the Great Basin Province (Baldwin et al. 2012). The region is characterized by low rainfall, hot to very hot summers, and cold winters. Regional habitat types consist of various agricultural habitats, sagebrush, urban, wet meadow, montane riparian, lacustrine, juniper, barren, and annual grasslands. Agricultural habitat types are the main habitats surrounding the study area and consist of irrigated hayfield, cropland, dryland grain crops, irrigated grain crops, deciduous orchard, evergreen orchard, and vineyard. Elevations in the study area range from approximately 4,135 – 4,190 feet above mean sea level. The study area is characterized by flat topography with surface flows generally flowing northeast.

6.1.1 Habitat Types

Habitat types mapped in the study area were obtained from CAL FIRE's Fire Resource and Assessment Program (FRAP) vegetation layer then verified and refined during a habitat assessment conducted by Ascent biologists on June 27, 2024. Habitat types were further refined during the aquatic resources field delineation in April 2025. General habitat types described in this document are classified using CDFW's *A Guide to Wildlife Habitats of California*, a habitat classification scheme that was developed to support CDFW's California Wildlife Habitat Relationship (CWHR) system (Mayer and Laudenslayer 1988). The CWHR system is a wildlife information system and predictive model for California's regularly occurring wildlife species and is the classification system used by FRAP.

CWHR upland habitats in the study area consist of perennial grassland, sagebrush, annual grassland, montane riparian, alkali desert scrub, and urban habitats (Figure 3). The acreage of each upland habitat type in the study area is provided in Table 2 and these habitat types are described below. Aquatic habitat descriptions and acreage are provided in Section 6.2, "Aquatic Resources" and are based on the Cowardin classification system (Cowardin et al. 1979) as adapted in *Classification of Wetlands and Deepwater Habitats of the United States* (FGDC 2013). Plant taxonomy follows *The Jepson Manual: Vascular Plants of California (Second Edition)* nomenclature (Baldwin et al. 2012) as revised by the Jepson eFlora (Jepson 2025). Common names of plant species are derived from the USDA Plants Database (2025). A complete list of plant species observed in the study area during the surveys, and their wetland indicator status is provided in Appendix C.

Table 2 California Wildlife Habitat Relationship System Upland Habitat Types and Acreage in the Study Area

Land Cover/Habitat Type	Acreage within the Study Area
Alkali Desert Scrub	0.02
Annual Grassland	0.69
Barren	0.02
Cropland	20.00
Montane riparian	0.07
Perennial Grassland	25.09
Sagebrush	19.74
Urban	18.75

UPLAND HABITATS

Perennial Grassland

Perennial grassland is the predominant habitat type mapped on the project site. Although mapped as perennial grassland, much of the area is dominated by the invasive plant perennial pepperweed (*Lepidium latifolium*) (FAC) and other ruderal species. There is no CWHR classification type that describes these areas that are disturbed and dominated by nonnative perennial plant species. Perennial grassland is the closest classification match to this disturbed habitat type.

There are small patches of perennial grasslands throughout the study area that are more typical of the perennial grassland habitat type, consisting of salt grass (*Distichlis spicata*) (FACW), Sandberg bluegrass (*Poa secunda*) (FACU), and beardless wildrye (*Elymus triticoides*) (FAC). Cheatgrass (*Bromus tectorum*) (NI) and medusa head (*Elymus caput-medusae*) (NI) are abundant in the perennial grassland habitat. Other common herbaceous species in this habitat type include tumble mustard (*Sisymbrium altissimum*) (FACU), poison hemlock (*Conium maculatum*) (FAC), bull thistle (*Cirsium vulgare*) (FACU), and Canada thistle (*Cirsium arvense*) (FAC), all of which are invasive species in California.

Sagebrush

Sagebrush habitat is scattered throughout the study area. Big sagebrush (*Artemisia tridentata*) (NL) and rubber rabbitbrush (*Ericameria nauseosa*) (NL) are the dominant species in the shrub layer of the sagebrush habitat, and salt grass is common in interspaces. This habitat type is highly disturbed in the study area, and the herb layer contains many of the same nonnative upland species that occur in the perennial grassland habitat described above.

Annual Grassland

Annual grassland habitat occurs in patches throughout the study area. Cheatgrass is the dominant species of the annual grassland habitat. It appears that cheatgrass is invading drier portions of the study area that were once dominated by perennial pepperweed.

Alkali Desert Scrub

There are small patches of alkali desert scrub in the study area, outside of the project site. These areas are dominated by greasewood (*Sarcobatus vermiculatus*) (FACU).

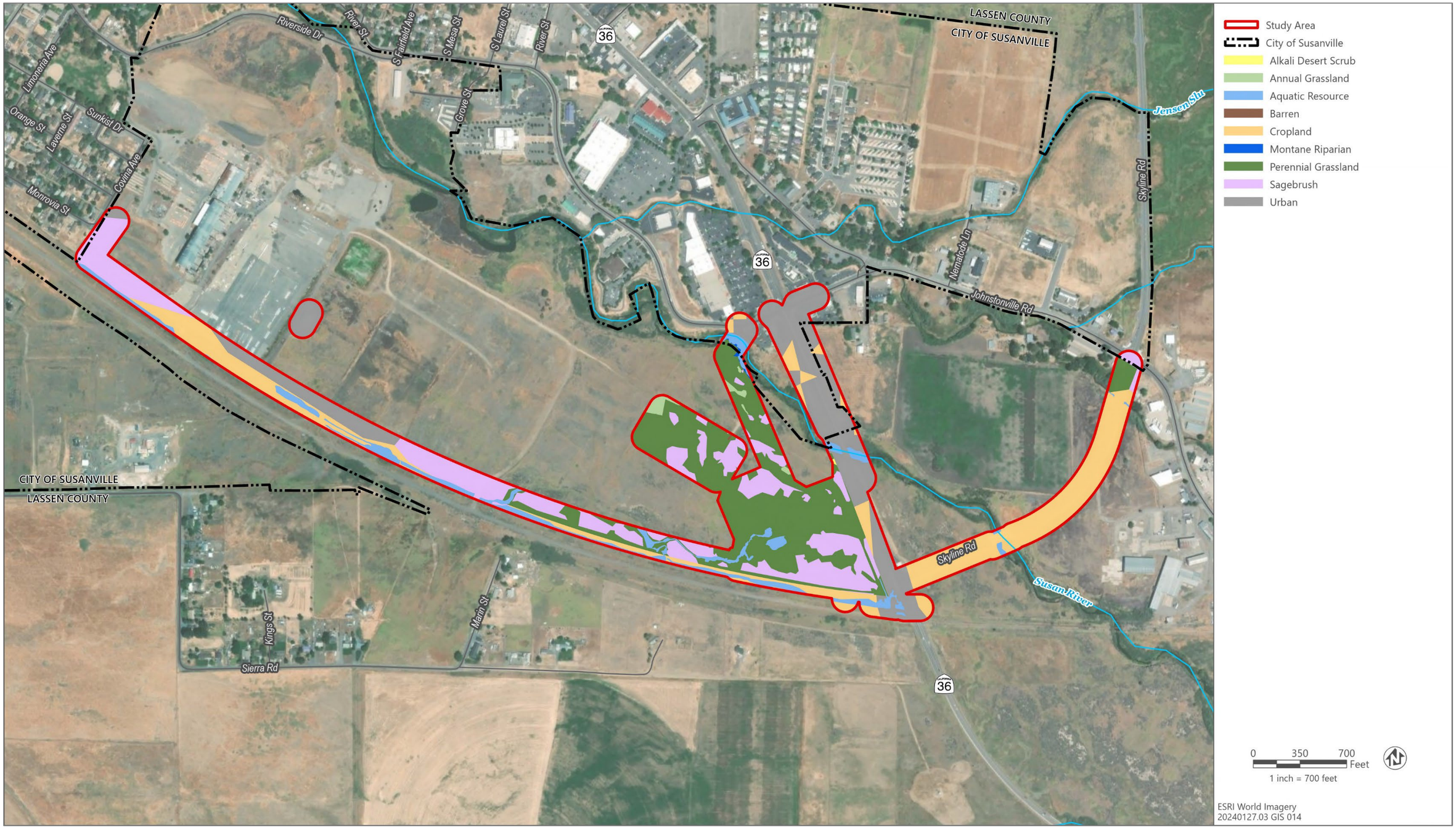
Urban

Urban habitat in the study area consists of roads and bridges including Hwy 36 and Skyline Road.

AQUATIC HABITATS

Riverine

Riverine systems include nearly all wetlands and deepwater habitats contained within a channel that periodically or continuously contains moving water or that forms a link between two standing water bodies. The two exceptions are channelized wetlands dominated by trees, shrubs, persistent emergent herbs, mosses, or lichens; and saltwater wetlands with 0.5 ppt or more ocean-derived salts. Riverine habitats are bounded by a bank, upland, or by wetlands dominated by trees, shrubs, or emergent marsh vegetation. The Susan River is a riverine habitat that occupies 0.56 acres in the study area. The Susan River is a perennial water that flows eastward from Silver and Caribou Lakes in the Sierra Nevada down to the Great Basin, discharging at Honey Lake. Precipitation in the western Sierra Nevada headwater portion of the watershed is mostly in the form of snow and influences the flow characteristics of the Susan River (Sutherland 2004). Other riverine habitats in the study area consist of an intermittent tributary of Brockman Slough and human created drainage channels.



Source: Adapted by Ascent in 2025.

Figure 3 Upland Habitat Types

6.1.2 Soils

Soils present in the study area consist of Blickenstaff sandy loam, Lakeview Loam, Modoc-Truax complex, Springmeyer sandy loam, Susanville-Smocreek complex, and Truckee Loam. The dominant Blickenstaff sandy loam soils are moderately alkaline to very strongly alkaline (USDA 2004). The project site consists entirely of Blickenstaff sandy loam. Table 3 provides a list of the soil map units in the study area, a brief description, and the hydric status of the soil map unit, according to the Custom Soil Resource Report for Susanville Area, Parts of Lassen and Plumas Counties, California (NRCS 2025). The locations of these soil units within the study area, as mapped by NRCS, are depicted on the soils map in Appendix D.

Table 3 Soil Map Units that Occur in the Study Area According to the Custom Soil Resource Report for Susanville Area, Parts of Lassen and Plumas Counties, California

Map Unit Name	Map Unit Composition	Components Descriptions	Hydric?
Blickenstaff sandy loam, 0-2 percent slopes	Blickenstaff: 85%	Very deep, moderately well-drained soils on stream terraces in alluvium derived from granite. Seasonal high-water table between 3.5 and 5 feet. Very low surface runoff, moderate permeability. Flooding and ponding frequency are none.	No
	Minor Components: 15%	Minor components are Honeylake (8%) and Truckee (7%).	No
Lakeview Loam, warm, 0-2 percent slopes	Lakeview Loam: 85%	Moderately well to somewhat poorly drained soils on flood plains, alluvial fans, and stream terraces, formed on alluvium weathered from lava rocks and small amounts of ash. Saturation in normal years; oxyaquic conditions below a depth of 76 cm in March through September. Flooding is rare or occasional.	No
	Minor Components: 15%	Minor Components are Madeleine (5%), Massack (5%), and Incy (5%)	No
Modoc-Truax complex, 0-2 percent slopes	Modoc: 70%	Moderately deep to a duripan, well drained soils on lake terraces and fan remnants, that formed in volcanic ash over lacustrine deposits or alluvium derived from basalt, andesite, and pyroclastic rocks. Medium surface runoff; moderately slow permeability. Flooding and ponding frequency are none.	No
	Traux: 20%	Deep well drained soils on alluvial fans that formed in mixed alluvium weathered from extrusive igneous rock. Slow to medium runoff; moderately slow permeability. Flooding and ponding frequency are none.	
	Minor Components: 10%	Minor Components are Ardep (4%), Bobert (4%), and Fordney (2%).	No
Springmeyer sandy loam, 0-5 percent slopes	Springmeyer: 95%	Very deep, well drained soils on fan remnants and inset fans that formed in alluvium derived from mixed igneous rocks. Medium or high surface runoff; moderately high saturated hydraulic conductivity. Flooding and ponding frequency are none.	No
	Minor Components: 5%	Minor Component is Mottsville (5%)	No
Susanville-Smocreek complex, 0-2 percent slopes	Susanville: 55%	Very deep, moderately well drained soils on stream terraces that formed in mixed alluvium. Runoff is slow; slow permeability. The soil is saturated between the depths of 60 and 72 inches at some time from January through April. Flooding is none to rare.	No
	Smocreek: 35%	Very deep, somewhat poorly drained soils on stream terraces that formed in alluvium derived from volcanic rocks. Slow runoff; moderately slow saturated hydraulic conductivity. Seasonal high water table at a depth of 100 to 150 cm. Subject to rare flooding for very brief or brief periods from January through May.	No
	Minor Components: 15%	Minor Components are Playas (5%), Humboldt (5%), and Yobe (5%).	Some[1]

Map Unit Name	Map Unit Composition	Components Descriptions	Hydric?
Truckee loam, 0-2 percent slopes	Truckee: 90%	Very deep, poorly drained soils on flood plains and stream terraces that formed in alluvium derived from mixed rocks. Very slow or slow runoff; moderately high saturated hydraulic conductivity. Seasonal water table is at 50 to 100 cm. Flooding and ponding frequency are none.	No
	Minor Component: 10%	Minor Component is Modoc (5%)	No

Notes: [1] Minor component Playas is a hydric soil.

Source: NRCS 2024.

6.1.3 Hydrology

The study area is located within the Lassen Creek-Susan River (HUC 180800030703) USGS hydrologic unit code (HUC)-12 watershed subbasin. The Susan River, a perennial stream channel, is the primary surface water body draining the study area and surrounding environs. It originates high in the Sierra Nevada approximately 30 miles upstream to the northwest of the study area. It flows from northwest to southeast through the study area, eventually flowing through Tanner Slough and the Tule Canal into Honey Lake. A perennial distributary of the Susan River also crosses through the study area at Skyline Road northeast of the project site. This distributary branches off the Susan River upstream of the study area then reconverges with the Susan River approximately 2.2 miles east of where it crosses the study area. The Susan River is a water of the United States as defined in Paragraph (a)1(i) of Section 404 of the Clean Water Act.

6.1.4 Climate

The climate of the Susanville region is Mediterranean with hot, dry summers and cool winters with the bulk of precipitation falling as snow during winter. Data from the National Oceanic and Atmospheric Administration's Agricultural Applied Climate Information System (AgACIS) for the Susanville 3.5 SSW weather station indicates that average annual precipitation from 2018 to 2025 was 13.01 inches, with the majority falling between December and February (NOAA 2025). No temperature data is gathered at the Susanville 3.5 SSW weather station. Based on the AgACIS data for the area, precipitation for the months preceding the field delineation in April 2025 was above average with 9.12 inches falling in February and 3.08 inches in March, but precipitation in April 2025 was below average at only 0.38 inches (NOAA 2025).

6.2 AQUATIC RESOURCES

Aquatic resources in the study area are depicted on the aquatic resources delineation maps in Appendix E. Delineation sample points and OHWM sample points are also depicted on the aquatic resources delineation map and are cross-referenced to the wetland determination data forms provided in Appendix A and the OHWM data forms provided in Appendix B. Descriptions of the aquatic resources in the study area are included below and representative photographs of each aquatic resource type are provided in Appendix F. An aquatic resource Excel file listing all potentially jurisdictional features, their Federal Geographic Data Committee (FGDC) (Cowardin) classification code, hydrogeomorphic (HGM) code, linear feet within the study area, water type, and latitude/longitude is provided in Appendix G.

A total of approximately 7.01 acres of aquatic resources, including wetlands, were documented in the study area (Table 4). These aquatic resources consist of lower perennial riverine waters, riverine ephemeral waters, palustrine emergent wetlands, palustrine scrub-shrub wetlands, and palustrine open water wetlands.

Table 4 Aquatic Resources in the Study Area

Aquatic Resource Name	Aquatic Resources Location (lat/long)	Aquatic Resource Size (acre) Required for All Resources	Aquatic Resource Size (linear feet) Required only for Stream Channels
Waters			
Riverine Lower Perennial (R2)		**0.63**	**750.14**
R2-1	40.40515118/ -120.63404483	0.26	217.77
R2-2	40.40282178/ -120.63143874	0.11	121.12
R2-3	40.40266594/ -120.63077340	0.10	153.90
R2-4	40.40107704/ -120.62709186	0.04	26.45
R2-5	40.40070639/ -120.62697903	0.09	105.10
R2-6	40.40387472/ -120.62395219	0.01	65.97
R2-7	40.40364179/ -120.62352964	0.02	59.83
Riverine Ephemeral (R6)		**0.15**	**699.14**
R6-1	40.40335043/-120.64457555	0.07	368.61
R6-2	40.40324431/ -120.64457500	0.08	330.53
Total Waters		**0.78**	**1,449.28**
Wetlands			
Palustrine Emergent (PEM)		**4.37**	**—**
PEM-1	40.39966913/ -120.63002570	0.29	—
PEM-2	40.39941383/ -120.62970370	0.03	—
PEM-3	40.40615981/ -120.65043190	0.60	—
PEM-4	40.40003745/ -120.63294890	0.71	—
PEM-5	40.40034673/ -120.63473610	0.29	—
PEM-6	40.40148640/ -120.63953570	0.84	—
PEM-7	40.40075377/ -120.63607990	0.07	—
PEM-8	40.40063009/ -120.63496210	0.66	—
PEM-9	40.40091445/ -120.63301510	0.24	—

Aquatic Resource Name	Aquatic Resources Location (lat/long)	Aquatic Resource Size (acre) Required for All Resources	Aquatic Resource Size (linear feet) Required only for Stream Channels
PEM-10	40.40183746/ -120.64040300	0.23	—
PEM-11	40.40228827/ -120.64202140	0.41	—
Palustrine Scrub-Shrub (PSS)		**0.76**	—
PSS-1	40.40289931/ -120.64357779	0.38	—
PSS-2	40.40477145/ -120.63387840	0.20	—
PSS-3	40.40275626/ -120.63083952	0.08	—
PSS-4	40.40256366/ -120.63061016	0.05	—
PSS-5	40.40291984/ -120.63149646	0.05	—
Palustrine Open Water (POW)		**0.41**	—
POW-1	40.40495719/ -120.64831413	0.04	—
POW-2	40.40399340/ -120.64589370	0.37	—

[1] The codes identify the types of wetlands and are explained in Appendix G.

Source: Ascent 2025, FGDC 2013.

6.2.1 Other Waters

Other waters are non-wetland aquatic resources with an OHWM, including lakes, rivers, and streams. Other waters in the study area consist of riverine lower perennial waters in the Susan River and an unnamed distributary channel. These features were delineated based on their OHWM.

RIVERINE LOWER PERENNIAL

Seven stream channel segments (five segments of the Susan River and two segments of an unnamed distributary channel) totaling approximately 0.63 acres (750.14 linear feet) are present in the study area. These stream channels are classified as riverine, lower perennial, unconsolidated bottom according to the *Classification of Wetlands and Deepwater Habitats of the United States* classification system (FGDC 2013). Riverine systems are wetlands and deepwater habitats contained within a channel (FGDC 2013). A perennial channel is a stream, or stream portion, that has continuous flowing water all year except during extreme drought years. Lower perennial riverine systems are characterized by a low gradient. Groundwater is the primary water source supporting stream flow and the water table is above the streambed for most of the year. Runoff from precipitation is a supplemental source of water for stream flow. Montane riparian scrub vegetation, specifically sandbar willow thickets, occurs within the OHWM of the Susan River within the study area. The bed substrate of the lower perennial streams in the study area is generally unvegetated and comprised primarily of sand and mud. OHWM data forms were completed for four sample points and are provided in Appendix B.

RIVERINE EPHEMERAL

Two parallel riverine channel segments comprising a total of 0.15 acres and 726.6 linear feet are present in the study area draining a palustrine scrub-shrub wetland. These channels are each approximately 3 feet wide, on average, and appear to contain flowing water for only short duration following precipitation and were therefore classified as ephemeral.

6.2.2 Palustrine Wetlands

Palustrine wetlands are nontidal wetlands dominated by trees, shrubs, persistent emergent plants, or emergent mosses or lichens (FGDC 2013). Palustrine wetlands also include unvegetated wetlands that meet the following criteria: 1) smaller than 20 acres, 2) do not have wave-formed or bedrock shorelines, 3) less than 8.2 feet deep at their deepest point, and 4) salinity less than 0.5 parts ppt. Palustrine wetlands include marshes, swamps, bogs, and fens, as well as small, shallow, permanent or intermittent ponds or other depressions. Palustrine wetlands can occur on shores of lakes or rivers, on floodplains, in isolated catchments, on slopes, or as islands in rivers or lakes (FGDC 2013). Three types of palustrine wetlands are present in the study area, palustrine emergent wetlands, palustrine scrub-shrub wetlands, and palustrine open water wetlands.

PALUSTRINE EMERGENT WETLANDS

Palustrine emergent wetlands have emergent vascular plants (i.e., erect, rooted, herbaceous hydrophytes, often monocots and usually perennial) as the dominant vegetation layer (FGDC 2013). Eleven palustrine emergent wetlands encompassing approximately 3.09 acres were delineated in the study, the majority of which formed at the toe slope of a historic railroad grade. Some others formed at the toe of the Highway 36 road grade. Emergent vegetation in these wetlands is typically persistent and dominated by some combination of perennial pepperweed (*Lepidium latifolium*) (FAC), common spikerush (*Eleocharis palustris*) (OBL), salt grass (*Distchlis spicata*) (FACW), Beardless wild-rye (*Elymus triticoides*) (FAC), and Great Basin wild-rye (*Elymus cinereus*) (FAC). None of the palustrine emergent wetlands in the study area have a continuous surface connection to other waters of the United States. Primary wetland hydrology indicators observed in the palustrine emergent wetlands include surface water, high water table, and saturation. Redox dark surface (Indicator F6) was the hydric soil indicator observed in each of these wetlands. Wetland determination data forms SP-1, SP-3, SP-5, and SP-7 in Appendix A provide information on palustrine emergent wetlands in the study area.

PALUSTRINE SCRUB-SHRUB WETLANDS

Palustrine scrub-shrub wetlands have woody plants less than 20 feet tall (i.e., shrubs) as the dominant vegetation layer. Five palustrine scrub-shrub wetlands, that may also be described as montane riparian habitat, were delineated in the study area encompassing approximately 0.76 acres. PSS-1 is within a ponded depression at the toe slope of a historic railroad grade and is not continuous with or connected to other waters of the United States. The remaining four palustrine scrub-shrub wetlands are on the banks of, and contiguous with, the Susan River. This montane riparian habitat is characterized by thickets of sandbar willow (*Salix exigua*) (FACW) and is classified as palustrine scrub-shrub broadleaved deciduous wetland using the *Classification of Wetlands and Deepwater Habitats of the United States* (FGDC 2013). Poison hemlock is a common herbaceous species found among the willow thickets. The primary hydrology indicator noted in this wetland type was drift deposits (Indicator B3). Hydric soils were indicated by the presence of a redox dark surface (Indicator F6). Wetland determination data form SP6 reflects the conditions observed in palustrine scrub shrub wetlands during the field investigation (Appendix A).

PALUSTRINE OPEN WATER WETLANDS

Two water-filled depressions covering approximately 0.65 acres in the study area were mapped as palustrine open water habitats. They consist of excavated basins that had ponded water with no emergent, submergent, or floating vegetation at the time of the field delineation, and with unconsolidated mud bottoms. Based on review of aerial imagery, these basins appear to be semi permanently flooded, meaning that surface water persists throughout the growing season in most years and the water table is at or near the surface when surface water is absent. The palustrine open water wetlands in the study area formed at the toe slope of a historic railroad grade and are not continuous with or connected to other waters of the United States.

6.2.3 Features Not Meeting Three Parameter Wetland Test

Five depressions containing hydrophytes were investigated in the study area during the field delineation and found not to meet the three wetland criteria. The dominant plant species in AW1 was salt grass and hydrology indicators observed were salt crust and saturation; however, no hydric soil indicators were present in AW1. Vegetation in AW2, AW3, and AW4 was co-dominated by salt grass and Medusahead (*Elymus caput-medusae*) (NI) and did not pass the hydrophytes dominance. One small, shallow depression (AW-5) was characterized by non-persistent vegetation dominated by harlequin calicoflower (*Downingia insignis*) (OBL), an annual, at the time of the field delineation, but no hydric soil indicators were found in this depression (see wetland determination data form SP-10 in Appendix A). No wetland hydrology indicators were observed in AW2, AW3, or AW4. The locations and extent of these features are shown on the excluded features map in Appendix H and wetland determination data forms SP-9, SP-10, SP-11 and SP-13 in Appendix A provide information about the conditions observed in these depressions during the field delineation.

6.2.4 Excluded Features

DITCHES

Three fragmented drainage ditches (D-1, D-2, and D-3) totaling approximately 19 linear feet were identified in the study area along a proposed sewer line route through an existing lumber yard. These drainage ditches were excavated wholly in and drain only dry land and do not carry relatively permanent water flow. Therefore, these features are excluded from regulation pursuant to paragraph (b)(3) of the CWA and are also excluded under the Porter-Cologne Act. The location and extent of these excluded features is provided on the map in Appendix H.

WATER FILLED DEPRESSIONS

Two water filled pits totaling 0.39 acres were found in the study area along a proposed sewer line route. Based on review of aerial imagery Pit-1 appears to have been excavated in dry land sometime between 2020 and 2023 and Pit-2 appears to have been originally excavated in dry land in 2015 but has been reconfigured since then. These pits dry out seasonally, typically in August. Because these are water-filled depressions that were excavated in dry land they are excluded from regulation pursuant to Section B7 of the CWA. The location and extent of these excluded features is provided on the map in Appendix H.

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Appendix A

Wetland Delineation Data Sheets

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region
See ERDC/EL TR-10-03; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Susanville Travel Center | City/County: Susanville | Sampling Date: 04/07/2025
Applicant/Owner: Lanes Engineers | State: CA | Sampling Point: SP-1
Investigator(s): Tammie Beyerl, Shannon Hickey | Section, Township, Range: Section 03, 04, 05T029N, R012E
Landform (hillslope, terrace, etc): terrace | Local relief (concave, convex, none): concave | Slope (%): 2
Subregion (LRR): | Lat: 40.39975143859151 | Long: -120.6299136102337 | Datum: WSG-84
Soil Map Unit Name: Blickenstaff sandy loam, 0 to 2 percent slopes | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	
Hydric Soil Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes X No
Wetland Hydrology Present?	Yes X	No	

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Eleocharis palustris* / Common spikerush	20	Yes	OBL
2. *Distichlis spicata* / Salt grass	15	Yes	FACW
3. *Lepidium latifolium* / Perennial pepperweed	10	No	FAC
4. *Leymus cinereus* / Great basin lyme grass	8	No	FAC
5. *Holosteum umbellatum* / Jagged chickweed	2	No	NI
6.			
7.			
8.			
9.			
10.			
11.			
	55	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Statum 45

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	15	x 2 =	30
FAC species	18	x 3 =	54
FACU species	0	x 4 =	0
UPL species	2	x 5 =	10
Column Totals:	55 (A)		114 (B)

Prevalence Index = B/A = 2.07

Hydrophytic Vegetation Indicators:
X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks:

SOIL

Sampling Point: SP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
12	10YR 2/2	95					Clay Loam	
			10YR 3/6	5	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 1 cm Muck (A9) **(LRR D, G)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) **(LRR G)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR A, E)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- X Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 8

Water Table Present? Yes X No ___ Depth (inches): 10

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 0

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region
See ERDC/EL TR-10-03; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Susanville Travel Center | City/County: Susanville | Sampling Date: 04/07/2025
Applicant/Owner: Lanes Engineers | State: CA | Sampling Point: SP-2
Investigator(s): Tammie Beyerl, Sahnnon Hickey | Section, Township, Range: Section 03, 04, 05T029N, R012E
Landform (hillslope, terrace, etc): terrace | Local relief (concave, convex, none): none | Slope (%): 2
Subregion (LRR): | Lat: | Long: | Datum: WSG-84
Soil Map Unit Name: Blickenstaff sandy loam. 0 to 2 percent slopes | NWI classification: Freshwater Emergent Wetland
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No X	**Is the Sampled Area within a Wetland?**	Yes	No X
Hydric Soil Present?	Yes	No X			
Wetland Hydrology Present?	Yes	No X			

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Matricaria discoidea* / Pineapple weed, Pineapple weed, Ray	15	Yes	FACU
2. *Bromus tectorum* / Downy chess, Cheat grass, Downy chess	15	Yes	NI
3. *Lepidium latifolium* / Perennial pepperweed	10	Yes	FAC
4. *Holosteum umbellatum* / Jagged chickweed	5	No	NI
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	45	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Statum 55

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 0 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = 0.0

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks:

SOIL

Sampling Point: SP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
14	10YR 2/2	100					Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 1 cm Muck (A9) **(LRR D, G)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) **(LRR G)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR A, E)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): _____

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region
See ERDC/EL TR-10-03; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Susanville Travel Center | City/County: Susanville | Sampling Date: 04/07/2025
Applicant/Owner: Lanes Engineers | State: CA | Sampling Point: SP-3
Investigator(s): Tammie Beyerl, Shannon Hickey | Section, Township, Range: Section 03, 04, 05T029N, R012E
Landform (hillslope, terrace, etc): depression on flood terrace | Local relief (concave, convex, none): concave | Slope (%): 4
Subregion (LRR): | Lat: 40.4008568494694 | Long: -120.6331322762968 | Datum: WSG-84
Soil Map Unit Name: Blickenstaff sandy loam, 0 to 2 percent slopes | NWI classification: Freshwater Pond
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	
Hydric Soil Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes X No
Wetland Hydrology Present?	Yes X	No	

Remarks: created pond

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Lepidium latifolium* / Perennial pepperweed	80	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	80	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Statum 20

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	80	x 3 =	240
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	80 (A)		240 (B)

Prevalence Index = B/A = 3.0

Hydrophytic Vegetation Indicators:
- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks:

SOIL

Sampling Point: SP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
14	7.5YR 2.5/1	75	5YR 3/4	25	C	M	Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 1 cm Muck (A9) **(LRR D, G)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) **(LRR G)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- X Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR A, E)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 1

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region
See ERDC/EL TR-10-03; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Susanville Travel Center | City/County: Susanville | Sampling Date: 04/07/2025
Applicant/Owner: Lanes Engineers | State: CA | Sampling Point: SP-4
Investigator(s): Tammie Beyerl, Sahnnon Hickey | Section, Township, Range: Section 03, 04, 05T029N, R012E
Landform (hillslope, terrace, etc): terrace | Local relief (concave, convex, none): convex | Slope (%): 5
Subregion (LRR): | Lat: | Long: | Datum: WSG-84
Soil Map Unit Name: Blickenstaff sandy loam, 0 to 2 percent slopes | NWI classification: Freshwater Pond
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes No X
Hydric Soil Present? Yes No X
Wetland Hydrology Present? Yes No X

Is the Sampled Area within a Wetland? Yes No X

Remarks: outside of created pond; NWI mapping is a bit off

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30-ft)			
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Lepidium latifolium* / Perennial pepperweed	20	Yes	FAC
2. *Taeniatherum caput-medusae* / Medusahead	20	Yes	NI
3. *Distichlis spicata* / Salt grass	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	45	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Statum 55

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	20	x 3 =	60
FACU species	0	x 4 =	0
UPL species	20	x 5 =	100
Column Totals:	45 (A)		170 (B)

Prevalence Index = B/A = 3.78

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks:

SOIL

Sampling Point: SP-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
16	7.5YR 3/3	100					Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 1 cm Muck (A9) **(LRR D, G)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) **(LRR G)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR A, E)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region
See ERDC/EL TR-10-03; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Susanville Travel Center | City/County: Susanville | Sampling Date: 04/08/2025
Applicant/Owner: Lanes Engineers | State: CA | Sampling Point: SP-5
Investigator(s): Tammie Beyerl, Shannon Hickey | Section, Township, Range: Section 03, 04, 05T029N, R012E
Landform (hillslope, terrace, etc): channel | Local relief (concave, convex, none): concave | Slope (%): 5
Subregion (LRR): | Lat: 40.39995633010534 | Long: -120.6326920087215 | Datum: WSG-84
Soil Map Unit Name: Blickenstaff sandy loam, 0 to 2 percent slopes | NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	
Hydric Soil Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes X No
Wetland Hydrology Present?	Yes X	No	

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Lepidium latifolium* / Perennial pepperweed	25	Yes	FAC
2. *Leymus cinereus* / Great basin lyme grass	20	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	45	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Statum 55

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	45	x 3 =	135
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	45 (A)		135 (B)

Prevalence Index = B/A = 3.0

Hydrophytic Vegetation Indicators:
- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks:

SOIL

Sampling Point: SP-5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 1 cm Muck (A9) **(LRR D, G)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) **(LRR G)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR A, E)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	X	No		Depth (inches): 6
Water Table Present?	Yes		No	X	Depth (inches): 1
Saturation Present? (includes capillary fringe)	Yes		No	X	Depth (inches): 0

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region
See ERDC/EL TR-10-03; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Susanville Travel Center | City/County: Susanville | Sampling Date: 04/08/2025
Applicant/Owner: Lanes Engineers | State: CA | Sampling Point: SP-6
Investigator(s): Tammie Beyerl, Shannon Hickey | Section, Township, Range: Section 03, 04, 05T029N, R012E
Landform (hillslope, terrace, etc): terrace | Local relief (concave, convex, none): concave | Slope (%): 10
Subregion (LRR): | Lat: 40.39991900924724 | Long: -120.6326736556802 | Datum: WSG-84
Soil Map Unit Name: Blickenstaff sandy loam, 0 to 2 percent slopes | NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes		No	X	
Hydric Soil Present?	Yes		No	X	**Is the Sampled Area**
Wetland Hydrology Present?	Yes	X	No		**within a Wetland?** Yes		No	X

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Festuca sp.* / Fescue	80	Yes	NI
2. *Lepidium latifolium* / Perennial pepperweed	15	No	FAC
3. *Bromus tectorum* / Downy chess, Cheat grass, Downy chess	5	No	NI
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Statum 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	15	x 3 =	45
FACU species	0	x 4 =	0
UPL species	85	x 5 =	425
Column Totals:	100 (A)		470 (B)

Prevalence Index = B/A = 4.7

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes | No X

Remarks:

SOIL

Sampling Point: SP-6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
16	10YR 2/2						Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 1 cm Muck (A9) **(LRR D, G)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) **(LRR G)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR A, E)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 14

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region
See ERDC/EL TR-10-03; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Susanville Travel Center | City/County: Susanville | Sampling Date: 04/08/2025
Applicant/Owner: Lanes Engineers | State: CA | Sampling Point: SP-7
Investigator(s): Tammie Beyerl, Shannon Hickey | Section, Township, Range: Section 03, 04, 05T029N, R012E
Landform (hillslope, terrace, etc): terrace | Local relief (concave, convex, none): concave | Slope (%): 2
Subregion (LRR): | Lat: 40.40187303091343 | Long: -120.6402614150794 | Datum: WSG-84
Soil Map Unit Name: Modoc-Truax complex, 0 to 2 percent slopes | NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No
Hydric Soil Present? Yes X No
Wetland Hydrology Present? Yes X No

Is the Sampled Area within a Wetland? Yes X No

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Herb Stratum (Plot size: 5-ft)			
1. *Eleocharis palustris* / Common spikerush	15	Yes	OBL
2. *Lepidium latifolium* / Perennial pepperweed	10	Yes	FAC
3. *Distichlis spicata* / Salt grass	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	30	= Total Cover	

Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Statum 70

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	5	x 2 =	10
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	30 (A)		55 (B)

Prevalence Index = B/A = 1.83

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks:

SOIL

Sampling Point: SP-7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
12	10YR 2/2	98	10YR 3/3	2	D	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 1 cm Muck (A9) **(LRR D, G)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) **(LRR G)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR A, E)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes X No ___ Depth (inches): 12

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 0

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region
See ERDC/EL TR-10-03; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Susanville Travel Center | City/County: Susanville | Sampling Date: 04/08/2025
Applicant/Owner: Lanes Engineers | State: CA | Sampling Point: SP-8
Investigator(s): Tammie Beyerl, Shannon Hickey | Section, Township, Range: Section 03, 04, 05T029N, R012E
Landform (hillslope, terrace, etc): terrace | Local relief (concave, convex, none): none | Slope (%): 2
Subregion (LRR): | Lat: 40.40193449966835 | Long: -120.6402517185968 | Datum: WSG-84
Soil Map Unit Name: Modoc-Truax complex, 0 to 2 percent slopes | NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes		No	X	
Hydric Soil Present?	Yes	X	No		**Is the Sampled Area**
Wetland Hydrology Present?	Yes	X	No		**within a Wetland?** Yes		No	X

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Leymus cinereus* / Great basin lyme grass	40	Yes	FAC
2. *Taeniatherum caput-medusae* / Medusahead	20	Yes	NI
3. *Distichlis spicata* / Salt grass	5	No	FACW
4. *Lepidium latifolium* / Perennial pepperweed	3	No	FAC
5. *Eleocharis palustris* / Common spikerush	2	No	OBL
6.			
7.			
8.			
9.			
10.			
11.			
	70	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Statum 30

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	2	x 1 =	2
FACW species	5	x 2 =	10
FAC species	43	x 3 =	129
FACU species	0	x 4 =	0
UPL species	20	x 5 =	100
Column Totals:	70 (A)		241 (B)

Prevalence Index = B/A = 3.44

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes | No X

Remarks:

SOIL

Sampling Point: SP-8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
4	10YR 2/2	100					Clay Loam	
12	7.5YR 2.5/2	95					Clay Loam	
			10YR 2/1	5	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 1 cm Muck (A9) **(LRR D, G)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) **(LRR G)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR A, E)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes X No ___ Depth (inches): 14

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region
See ERDC/EL TR-10-03; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Susanville Travel Center | City/County: Susanville | Sampling Date: 04/08/2025
Applicant/Owner: Lanes Engineers | State: CA | Sampling Point: SP-9
Investigator(s): Tammie Beyerl, Shannon Hickey | Section, Township, Range: Section 03, 04, 05T029N, R012E
Landform (hillslope, terrace, etc): terrace | Local relief (concave, convex, none): none | Slope (%): 2
Subregion (LRR): | Lat: 40.40206206596127 | Long: -120.6402289703206 | Datum: WSG-84
Soil Map Unit Name: Modoc-Truax complex, 0 to 2 percent slopes | NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	X	No		
Hydric Soil Present?	Yes		No	X	**Is the Sampled Area within a Wetland?** Yes		No	X
Wetland Hydrology Present?	Yes	X	No		

Remarks: suspected alkali wetland but no hydric soils

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Distichlis spicata* / Salt grass	20	Yes	FACW
2. *Leymus triticoides* / Beardless lyme grass	3	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	23	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Statum 77

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	3	x 3 =	9
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	23 (A)		49 (B)

Prevalence Index = B/A = 2.13

Hydrophytic Vegetation Indicators:
X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks:

SOIL

Sampling Point: SP-9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
12	7.5YR 3/4	95	10YR 2/1	5	C	M	Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 1 cm Muck (A9) **(LRR D, G)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) **(LRR G)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR A, E)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- X Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 12

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region
See ERDC/EL TR-10-03; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Susanville Travel Center | City/County: Susanville | Sampling Date: 04/08/2025
Applicant/Owner: Lanes Engineers | State: CA | Sampling Point: SP-10
Investigator(s): Tammie Beyerl, Shannon Hickey | Section, Township, Range: Section 03, 04, 05T029N, R012E
Landform (hillslope, terrace, etc): terrace | Local relief (concave, convex, none): none | Slope (%): 2
Subregion (LRR): | Lat: 40.40097121369217 | Long: -120.6305014926938 | Datum: WSG-84
Soil Map Unit Name: Truckee loam, 0 to 2 percent slopes | NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	X	No		
Hydric Soil Present?	Yes		No	X	**Is the Sampled Area within a Wetland?** Yes		No	X
Wetland Hydrology Present?	Yes	X	No		

Remarks: This is a mesic area in a maintained roadside grassland dominated by Downingia insignis. The soils are not hydric.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30-ft)			
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Downingia insignis* / Harlequin downingia	40	Yes	OBL
2. *Lepidium latifolium* / Perennial pepperweed	5	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	45	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Statum 55

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	45 (A)		55 (B)

Prevalence Index = B/A = 1.22

Hydrophytic Vegetation Indicators:
X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks:

SOIL

Sampling Point: SP-10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
12	10YR 2/2	98	10YR 2/1	2	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 1 cm Muck (A9) **(LRR D, G)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) **(LRR G)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR A, E)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Surface soil cracks were observed all over the site, even in clearly upland areas so it may just be a property of the soil rather than a hydrology indicator.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region
See ERDC/EL TR-10-03; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Susanville Travel Center | City/County: Susanville | Sampling Date: 04/08/2025
Applicant/Owner: Lanes Engineers | State: CA | Sampling Point: SP-11
Investigator(s): Tammie Beyerl, Shannon Hickey | Section, Township, Range: Section 03, 04, 05T029N, R012E
Landform (hillslope, terrace, etc): terrace | Local relief (concave, convex, none): none | Slope (%): 2
Subregion (LRR): | Lat: 40.40052854446075 | Long: -120.6302879913839 | Datum: WSG-84
Soil Map Unit Name: Truckee loam, 0 to 2 percent slopes | NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No X	**Is the Sampled Area within a Wetland?**	Yes	No X
Hydric Soil Present?	Yes	No X			
Wetland Hydrology Present?	Yes X	No			

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Distichlis spicata* / Salt grass	25	Yes	FACW
2. *Taeniatherum caput-medusae* / Medusahead	20	Yes	NI
3. *Microsteris gracilis* / Slender phlox	5	No	FACU
4. *Lepidium latifolium* / Perennial pepperweed	5	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	55	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Statum 45

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	5	x 3 =	15
FACU species	5	x 4 =	20
UPL species	20	x 5 =	100
Column Totals:	55 (A)		185 (B)

Prevalence Index = B/A = 3.36

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks:

SOIL

Sampling Point: SP-11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
12	10YR 2/2	99	10YR 2/1	1	C	PL,M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 1 cm Muck (A9) **(LRR D, G)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) **(LRR G)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR A, E)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): _____

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Surface soil cracks were observed all over the site, may just be a property of the soil rather than a wetland hydrology indicator.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region
See ERDC/EL TR-10-03; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Susanville Travel Center | City/County: Susanville | Sampling Date: 04/08/2025
Applicant/Owner: Lanes Engineers | State: CA | Sampling Point: SP-12
Investigator(s): Tammie Beyerl, Shannon Hickey | Section, Township, Range: Section 03, 04, 05T029N, R012E
Landform (hillslope, terrace, etc): terrace | Local relief (concave, convex, none): none | Slope (%): 2
Subregion (LRR): | Lat: 40.40052530782182 | Long: -120.6303334040924 | Datum: WSG-84
Soil Map Unit Name: Truckee loam, 0 to 2 percent slopes | NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No X	**Is the Sampled Area within a Wetland?**	Yes	No X
Hydric Soil Present?	Yes	No X			
Wetland Hydrology Present?	Yes X	No			

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Herb Stratum (Plot size: 5-ft)			
1. *Taeniatherum caput-medusae* / Medusahead	35	Yes	NI
2. *Lepidium latifolium* / Perennial pepperweed	5	No	FAC
3. *Bromus tectorum* / Downy chess, Cheat grass, Downy chess	5	No	NI
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	45	= Total Cover	

Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Statum 55

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	40	x 5 =	200
Column Totals:	45 (A)		215 (B)

Prevalence Index = B/A = 4.78

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks:

SOIL

Sampling Point: SP-12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
12	10YR 2/2	100					Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 1 cm Muck (A9) **(LRR D, G)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) **(LRR G)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR A, E)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): _____

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Soil cracks are present throughout the site; may just be a property of the soil rather than a wetland hydrology indicator.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region
See ERDC/EL TR-10-03; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Susanville Travel Center | City/County: Susanville | Sampling Date: 04/08/2025
Applicant/Owner: Lanes Engineers | State: CA | Sampling Point: SP-13
Investigator(s): Tammie Beyerl, Shannon Hickey | Section, Township, Range: Section 03, 04, 05T029N, R012E
Landform (hillslope, terrace, etc): terrace | Local relief (concave, convex, none): none | Slope (%): 2
Subregion (LRR): | Lat: 40.40001281389897 | Long: -120.6301049116184 | Datum: WSG-84
Soil Map Unit Name: Blickenstaff sandy loam. 0 to 2 percent slopes | NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No X	**Is the Sampled Area within a Wetland?**	Yes	No X
Hydric Soil Present?	Yes	No X			
Wetland Hydrology Present?	Yes	No X			

Remarks: This area was investigated as potential wetland but did not meet the criteria. It is upland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Taeniatherum caput-medusae* / Medusahead	25	Yes	NI
2. *Eleocharis palustris* / Common spikerush	20	Yes	OBL
3. *Holosteum umbellatum* / Jagged chickweed	5	No	NI
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	50	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Statum 50

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	30	x 5 =	150
Column Totals:	50 (A)		170 (B)

Prevalence Index = B/A = 3.4

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks:

SOIL

Sampling Point: SP-13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
12	10YR 2/2	100					Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 1 cm Muck (A9) **(LRR D, G)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 2.5 cm Mucky Peat or Peat (S2) **(LRR G)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR A, E)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): _____

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix B

OHWM Data Sheets

U.S. Army Corps of Engineers (USACE)

RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

OMB Control No. 0710-XXXX

Approval Expires:

Project ID #: 20240127.03	Site Name: Susanville Travel Stop HW-1	Date and Time: 4/7/2025 06:38 PM
Location (lat/long): 40.40275768, -120.631294	Investigator(s): T. Beyerl, S. Hickey	

Step 1 Site overview from remote and online resources
Check boxes for online resources used to evaluate site:

- [ ] gage data
- [ ] LiDAR
- [ ] geologic maps
- [ ] climatic data
- [x] satellite imagery
- [ ] land use maps
- [x] aerial photos
- [x] topographic maps
- [ ] Other: _____

Describe land use and flow conditions from online resources.
Were there any recent extreme events (floods or drought)?
Surrounding land uses are agricultural and commercial. No recent extreme events.

Step 2 Site conditions during field assessment

First look for changes in channel shape, depositional and erosional features, and changes in vegetation and sediment type, size, density, and distribution. Make note of natural or man-made disturbances that would affect flow and channel form, such as bridges, riprap, landslides, rockfalls etc.

Hwy 36 bridge crossing over Susan River.

Step 3 Check the boxes next to the indicators used to identify the location of the OHWM.

OHWM is at a transition point, therefore some indicators that are used to determine location may be just below and above the OHWM. From the drop-down menu next to each indicator, select the appropriate location of the indicator by selecting either just below `b', at `x', or just above `a' the OHWM.

OHWM. Go to page 2 to describe overall rationale for location of OHWM, write any additional observations, and to attach a photo log.

Geomorphic indicators

- [ ] **Break in slope:** x
  - [ ] *on the bank:* a
  - [ ] *undercut bank:*
  - [ ] *valley bottom:*
  - [ ] Other: _____
- [ ] **Shelving:**
  - [ ] *shelf at top of bank:*
  - [ ] *natural levee:*
  - [ ] *man-made berms or levees:*
  - [ ] *other berms:* _____
- [ ] **Channel bar:**
  - [ ] *shelving (berms) on bar:*
  - [ ] *unvegetated:*
  - [ ] *vegetation transition (go to veg. indicators)*
  - [ ] *sediment transition (go to sed. indicators)*
  - [ ] *upper limit of deposition on bar:*
- [ ] **Instream bedforms and other bedload transport evidence:**
  - [ ] *deposition bedload indicators (e.g., imbricated clasts, gravel sheets, etc.)*
  - [ ] *bedforms (e.g., poofs, riffles, steps, etc.):*
  - [ ] *erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.)*
- [ ] **Secondary channels:**

Sediment indicators

- [ ] **Soil development:**
- [ ] **Changes in character of soil:** x
- [ ] **Mudcracks:**
- [ ] **Changes in particle-sized distribution:**
  - [ ] *transition from* _____ to _____
  - [ ] *upper limit of sand-sized particles*
  - [ ] *silt deposits:*

Vegetation Indicators

- [ ] **Change in vegetation type and/or density:** x

  Check the appropriate boxes and select the general vegetation change *(e.g., graminoids to woody shrubs).* ***Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain.***

  - [ ] *vegetation absent to:*
  - [ ] *moss to:*
  - [ ] *forbs to:*
  - [ ] *graminoids to:*
  - [ ] *woody shrubs to:* woody shrubs
  - [ ] *deciduous trees to:*
  - [ ] *coniferous trees to:*
- [ ] **Vegetation matted down and/or bent:**
- [ ] **Exposed roots below intact soil layer:**

Ancillary indicators

- [ ] **Wracking/presence of organic litter:** x
- [ ] **Presence of large wood:**
- [ ] **Leaf litter disturbed or washed away:**
- [ ] **Water staining:**
- [ ] **Weathered clasts or bedrock:**

Other observed indicators?

Describe:
bent over willows

Step 4 Is additional information needed to support this determination?

- [ ] Yes
- [x] No

If yes, describe and attach information to datasheet:

Project ID #: 20240127.03

Step 5 Describe rationale for location of OHWM

Steep, vertical banks with willows below top of bank and upland grasses beyond top of bank; consistent upstream and downstream. Shrubs are immature and have debris in them deposited by high flows.

Additional observations or notes

Attach a photo log of the site. Use the table below, or attach separately.

Photo log attached? ☒ Yes ☐ No If no, explain why not: _____

List photographs and include descriptions in the table below.

Number photographs in the order that they are taken. Attach photographs and include annotations of features.

Photo Number	Photograph description
HW1a	From west side of bridge, south bank looking north across river
HW1b	From west side of bridge, south bank looking eastward (downstream) under bridge
HW1c	From west side of bridge, south bank looking west (upstream)

U.S. Army Corps of Engineers (USACE)

RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

OMB Control No. 0710-XXXX

Approval Expires:

Project ID #: 20240127.03	Site Name: Susanville Travel Stop - HW-2	Date and Time: 04/08/2025 11:24 AM
Location (lat/long): 40.40497294, -120.63409329	Investigator(s): T. Beyerl, S. Hickey	

Step 1 Site overview from remote and online resources
Check boxes for online resources used to evaluate site:

- [ ] gage data
- [ ] LiDAR
- [ ] geologic maps
- [ ] climatic data
- [x] satellite imagery
- [ ] land use maps
- [x] aerial photos
- [x] topographic maps
- [ ] Other: _____

Describe land use and flow conditions from online resources. Were there any recent extreme events (floods or drought)?
Surrounding land uses are agricultural and commercial. Lots of trash from surrounding restaurants/shopping center. No recent extreme events

Step 2 Site conditions during field assessment

First look for changes in channel shape, depositional and erosional features, and changes in vegetation and sediment type, size, density, and distribution. Make note of natural or man-made disturbances that would affect flow and channel form, such as bridges, riprap, landslides, rockfalls etc.

Recent bank erosion. Steep, sandy banks subject to frequent slumping.

Step 3 Check the boxes next to the indicators used to identify the location of the OHWM.

OHWM is at a transition point, therefore some indicators that are used to determine location may be just below and above the OHWM. From the drop-down menu next to each indicator, select the appropriate location of the indicator by selecting either just below `b', at `x', or just above `a' the OHWM.

OHWM. Go to page 2 to describe overall rationale for location of OHWM, write any additional observations, and to attach a photo log.

Geomorphic indicators

- [ ] **Break in slope:** a
  - [ ] *on the bank:* x
  - [ ] *undercut bank:*
  - [ ] *valley bottom:*
  - [ ] Other: _____
- [ ] **Shelving:**
  - [ ] *shelf at top of bank:*
  - [ ] *natural levee:*
  - [ ] *man-made berms or levees:*
  - [ ] *other berms:* _____
- [ ] **Channel bar:**
  - [x] *shelving (berms) on bar:* b
  - [ ] *unvegetated:*
  - [ ] *vegetation transition (go to veg. indicators)*
  - [ ] *sediment transition (go to sed. indicators)*
  - [ ] *upper limit of deposition on bar:*
- [ ] **Instream bedforms and other bedload transport evidence:**
  - [ ] *deposition bedload indicators (e.g., imbricated clasts, gravel sheets, etc.)*
  - [ ] *bedforms (e.g., poofs, riffles, steps, etc.):*
  - [ ] *erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.)*
- [ ] **Secondary channels:**

Sediment indicators

- [ ] **Soil development:**
- [ ] **Changes in character of soil:** x
- [ ] **Mudcracks:**
- [ ] **Changes in particle-sized distribution:**
  - [ ] *transition from* _____ to _____
  - [x] *upper limit of sand-sized particles*
  - [ ] *silt deposits:*

Vegetation Indicators

- [ ] **Change in vegetation type and/or density:**

  Check the appropriate boxes and select the general vegetation change *(e.g., graminoids to woody shrubs).* ***Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain.***

  - [ ] *vegetation absent to:*
  - [ ] *moss to:*
  - [ ] *forbs to:*
  - [ ] *graminoids to:*
  - [ ] *woody shrubs to:*
  - [ ] *deciduous trees to:*
  - [ ] *coniferous trees to:*
- [x] **Vegetation matted down and/or bent:** b
- [ ] **Exposed roots below intact soil layer:**

Ancillary indicators

- [ ] **Wracking/presence of organic litter:** x
- [ ] **Presence of large wood:**
- [ ] **Leaf litter disturbed or washed away:**
- [ ] **Water staining:**
- [ ] **Weathered clasts or bedrock:**

Other observed indicators?

Describe:

Step 4 Is additional information needed to support this determination?

- [ ] Yes
- [ ] No

If yes, describe and attach information to datasheet:

Project ID #: 20240127.03

Step 5 Describe rationale for location of OHWM

Multiple indicators at same elevation and consistent up and downstream

Additional observations or notes

Attach a photo log of the site. Use the table below, or attach separately.

Photo log attached? ☒ Yes ☐ No If no, explain why not: _____

List photographs and include descriptions in the table below.

Number photographs in the order that they are taken. Attach photographs and include annotations of features.

Photo Number	Photograph description
HW2a	From top of south bank looking upstream (west)
HW2b	from shelf looking downstream and showing bent over vegetation and debris deposited in willows

U.S. Army Corps of Engineers (USACE)

RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

OMB Control No. 0710-XXXX

Approval Expires:

Project ID #: 20240127.03	Site Name: Susanville Travel Stop - HW-3	Date and Time: 04/08/2025 04:18 PM
Location (lat/long): 40.40386539, -120.62393588	Investigator(s): T. Beyerl, S. Hickey	

Step 1 Site overview from remote and online resources

Check boxes for online resources used to evaluate site:

- ☐ gage data
- ☐ LiDAR
- ☐ geologic maps
- ☐ climatic data
- ☒ satellite imagery
- ☐ land use maps
- ☒ aerial photos
- ☒ topographic maps
- ☐ Other: _____

Describe land use and flow conditions from online resources. Were there any recent extreme events (floods or drought)?

Surrounding land use is agriculture. No recent extreme events.

Step 2 Site conditions during field assessment

First look for changes in channel shape, depositional and erosional features, and changes in vegetation and sediment type, size, density, and distribution. Make note of natural or man-made disturbances that would affect flow and channel form, such as bridges, riprap, landslides, rockfalls etc.

Bridge crossing of Skyline Rd over Susan River constructed at this location in 2019/2020. Rip-rap present below OHWM. Steep, sandy banks with frequesnt slumping.

Step 3 Check the boxes next to the indicators used to identify the location of the OHWM.

OHWM is at a transition point, therefore some indicators that are used to determine location may be just below and above the OHWM. From the drop-down menu next to each indicator, select the appropriate location of the indicator by selecting either just below `b', at `x', or just above `a' the OHWM.

OHWM. Go to page 2 to describe overall rationale for location of OHWM, write any additional observations, and to attach a photo log.

Geomorphic indicators

- ☒ **Break in slope:** x
  - ☐ *on the bank:*
  - ☐ *undercut bank:*
  - ☐ *valley bottom:*
  - ☐ Other: _____
- ☐ **Shelving:** b
  - ☐ *shelf at top of bank:*
  - ☐ *natural levee:*
  - ☐ *man-made berms or levees:*
  - ☐ *other berms:* _____
- ☐ **Channel bar:**
  - ☐ *shelving (berms) on bar:*
  - ☐ *unvegetated:*
  - ☐ *vegetation transition (go to veg. indicators)*
  - ☐ *sediment transition (go to sed. indicators)*
  - ☐ *upper limit of deposition on bar:*
- ☐ **Instream bedforms and other bedload transport evidence:**
  - ☐ *deposition bedload indicators (e.g., imbricated clasts, gravel sheets, etc.)*
  - ☐ *bedforms (e.g., poofs, riffles, steps, etc.):*
  - ☐ *erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.)*
- ☐ **Secondary channels:**

Sediment indicators

- ☐ **Soil development:**
- ☐ **Changes in character of soil:**
- ☐ **Mudcracks:**
- ☐ **Changes in particle-sized distribution:**
  - ☐ *transition from* _____ to _____
  - ☐ *upper limit of sand-sized particles*
  - ☐ *silt deposits:*

Vegetation Indicators

- ☐ **Change in vegetation type and/or density:**

  Check the appropriate boxes and select the general vegetation change *(e.g., graminoids to woody shrubs).* ***Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain.***

  - ☐ *vegetation absent to:*
  - ☐ *moss to:*
  - ☒ *forbs to:* woody shrubs
  - ☐ *graminoids to:*
  - ☐ *woody shrubs to:*
  - ☐ *deciduous trees to:*
  - ☐ *coniferous trees to:*
- ☐ **Vegetation matted down and/or bent:** b
- ☐ **Exposed roots below intact soil layer:**

Ancillary indicators

- ☐ **Wracking/presence of organic litter:**
- ☐ **Presence of large wood:**
- ☒ **Leaf litter disturbed or washed away:** b
- ☐ **Water staining:**
- ☐ **Weathered clasts or bedrock:**

Other observed indicators?

Describe:

Step 4 Is additional information needed to support this determination?

☐ Yes ☒ No

If yes, describe and attach information to datasheet:

Project ID #: 20240127.03

Step 5 Describe rationale for location of OHWM

Multiple OHWM indicators at same elevation.

Additional observations or notes

Attach a photo log of the site. Use the table below, or attach separately.

Photo log attached? ☐ Yes ☐ No If no, explain why not: _____

List photographs and include descriptions in the table below.

Number photographs in the order that they are taken. Attach photographs and include annotations of features.

Photo Number	Photograph description
HW3a	From NW side of bridgel ooking downstream under bridge
HW3b	From SW side of bridge looking downstream
HW3c	From SW side of bridge looking upstream under bridge

U.S. Army Corps of Engineers (USACE)

RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

OMB Control No. 0710-XXXX

Approval Expires:

Project ID #: 20240127.03	Site Name: Susanville Travel Stop - HW-4	Date and Time: 4/8/2025 03:58 PM
Location (lat/long): 40.40386539, -120.6239588	Investigator(s): Tammie Beyerl	

Step 1 Site overview from remote and online resources

Check boxes for online resources used to evaluate site:

- ☐ gage data
- ☐ LiDAR
- ☐ geologic maps
- ☐ climatic data
- ☐ satellite imagery
- ☐ land use maps
- ☒ aerial photos
- ☒ topographic maps
- ☐ Other: _____

Describe land use and flow conditions from online resources. Were there any recent extreme events (floods or drought)?

Surrounding land use is rural residential, agricultural, and commercial. No recent extreme events. Increased urbanization over recent decades and development of agricultural land.

Step 2 Site conditions during field assessment

First look for changes in channel shape, depositional and erosional features, and changes in vegetation and sediment type, size, density, and distribution. Make note of natural or man-made disturbances that would affect flow and channel form, such as bridges, riprap, landslides, rockfalls etc.

Single-thread stream. Channelized downstream of study area. Skyline Rd. Bridge constructed at this stream location in 2019 and restoration efforts in progress (willow planting) on bank/flood terrace. Stream is used as source for pasture irrigation downstream of study area.

Step 3 Check the boxes next to the indicators used to identify the location of the OHWM.

OHWM is at a transition point, therefore some indicators that are used to determine location may be just below and above the OHWM. From the drop-down menu next to each indicator, select the appropriate location of the indicator by selecting either just below `b', at `x', or just above `a' the OHWM.

OHWM. Go to page 2 to describe overall rationale for location of OHWM, write any additional observations, and to attach a photo log.

Geomorphic indicators

- ☐ **Break in slope:**
  - ☒ *on the bank:* x
  - ☐ *undercut bank:*
  - ☐ *valley bottom:*
  - ☐ Other: _____
- ☐ **Shelving:**
  - ☐ *shelf at top of bank:*
  - ☐ *natural levee:*
  - ☐ *man-made berms or levees:*
  - ☐ *other berms:* _____
- ☐ **Channel bar:**
  - ☐ *shelving (berms) on bar:*
  - ☐ *unvegetated:*
  - ☐ *vegetation transition (go to veg. indicators)*
  - ☐ *sediment transition (go to sed. indicators)*
  - ☐ *upper limit of deposition on bar:*
- ☐ **Instream bedforms and other bedload transport evidence:**
  - ☐ *deposition bedload indicators (e.g., imbricated clasts, gravel sheets, etc.)*
  - ☐ *bedforms (e.g., poofs, riffles, steps, etc.):*
  - ☐ *erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.)*
- ☐ **Secondary channels:**

Sediment indicators

- ☐ **Soil development:**
- ☐ **Changes in character of soil:**
- ☐ **Mudcracks:**
- ☐ **Changes in particle-sized distribution:**
  - ☐ *transition from* _____ to _____
  - ☐ *upper limit of sand-sized particles*
  - ☐ *silt deposits:*

Vegetation Indicators

- ☒ **Change in vegetation type and/or density:** x

  Check the appropriate boxes and select the general vegetation change *(e.g., graminoids to woody shrubs).* ***Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain.***

  - ☐ *vegetation absent to:*
  - ☐ *moss to:*
  - ☒ *forbs to:* woody shrubs
  - ☐ *graminoids to:*
  - ☐ *woody shrubs to:*
  - ☐ *deciduous trees to:*
  - ☐ *coniferous trees to:*
- ☐ **Vegetation matted down and/or bent:**
- ☐ **Exposed roots below intact soil layer:**

Ancillary indicators

- ☐ **Wracking/presence of organic litter:**
- ☐ **Presence of large wood:**
- ☐ **Leaf litter disturbed or washed away:**
- ☒ **Water staining:** x
- ☐ **Weathered clasts or bedrock:**

Other observed indicators?

Describe:

Step 4 Is additional information needed to support this determination?

☐ Yes ☒ No

If yes, describe and attach information to datasheet:

Project ID #: 20240127.03

Step 5 Describe rationale for location of OHWM

Break in slope, vegetation changes, and water staining all occur at this same elevation and are persistent up and downstream

Additional observations or notes

Attach a photo log of the site. Use the table below, or attach separately.

Photo log attached? ☒ Yes ☐ No If no, explain why not: _____

List photographs and include descriptions in the table below.

Number photographs in the order that they are taken. Attach photographs and include annotations of features.

Photo Number	Photograph description
HW6a	looking NE from south bank, west side of bridge, shows culverts
HW6b	looking NW from south bank, west side of bridge, looking upstream; emergent marsh and willow scrub visible
HW5	looking SE from north bank on east side of bridge; looking downstream



Source: Ascent in 2025.

HW1a. From OHWM on south bank of Susan River at Main Street Bridge. Taken from west side of bridge looking northeast, April 2025.



Source: Ascent in 2025.

HW1b. From south bank of Susan River at OHWM, facing northeast under Main Street Bridge. Taken April 2025.



Source: Ascent in 2025.

HW1c. Susan River from south bank at Main Street Bridge looking upstream (west). Taken April 2025.



Source: Ascent in 2025.

HW2a. Susan River from HW-2 (south bank) looking west (upstream). Taken April 2025.



Source: Ascent in 2025.

HW2b. Looking downstream (east) from a shelf in the Susan River at HW-2 transect. Willow thickets (PSS-2) visible within OHWM. Taken April 2025.



Source: Ascent in 2025.

HW3a. Susan River from NW side of Skyline Road Bridge looking downstream under bridge. Taken April 2025.



Source: Ascent in 2025.

From SW side of bridge looking downstream. Eroded banks visible. Taken April 2025.



Source: Ascent in 2025.

HW3c. From SW side of Skyline Road Bridge looking upstream under bridge. Taken April 2025.



Source: Ascent in 2025.

HW4a. Looking NE at culverts under Skyline Road from OHWM on south bank, west side of bridge. Taken April 2025.



Source: Ascent in 2025.

HW4b. Lower perennial stream looking upstream from south bank on SW side of Skyline Road. Taken April 2025.



Source: Ascent in 2025.

HW4c. Lower perennial stream looking SE from north bank on east side of Skyline Road; looking downstream. Taken April 2025.

Appendix C

Plant List

Plant Species Observed in the Susanville Travel Center Study Area during April 2025

Scientific Name	Common Name	Indicator
Achillea millefolium	Yarrow	FACU
Acmispon americanus var. *americanus*	Spanish lotus	FACU
Aegilops cylindrica	Jointed goatgrass, Jointed goat grass	NI
Agropyron cristatum	Crested wheatgrass	NI
Alisma triviale	Northern water plantain	OBL
Amaranthus albus	Tumbleweed	FACU
Ambrosia acanthicarpa	Annual burrweed, annual bur-sage	NI
Amsinckia menziesii	Fiddleneck, common fiddleneck, small-flowered fiddleneck	NI
Artemisia douglasiana	California mugwort	FACW
Artemisia tridentata	Common sagebrush	NI
Asclepias fascicularis	Milkweed, narrow-leaf milkweed	FAC
Asclepias speciosa	Showy milkweed	FAC
Asparagus officinalis	Garden asparagus	FACU
Atriplex micrantha	Twoscale saltbush, Russian atriplex	NI
Bassia hyssopifolia	Five horn bassia	FACU
Berberis aquifolium	Mountain grape	FACU
Bromus inermis	Smooth brome, smooth brome, Hungarian brome	UPL
Bromus japonicus	Hairy chess, Japanese chess, Japanese brome	UPL
Bromus tectorum	Downy chess, cheat grass, downy chess	NI
Centaurea solstitialis	Yellow starthistle, yellow star-thistle	NI
Centaurea stoebe	Spotted knapweed	NI
Chenopodium album	Lambs quarters, lamb's quarters	FACU
Chenopodium sp.		NI
Chorispora tenella	Crossflower	NI
Cichorium intybus	Chicory	FACU
Cirsium arvense	Canada thistle	FAC
Cirsium vulgare	Bullthistle, Bull thistle	FACU
Conium maculatum	Poison hemlock	FAC
Cotinus coggygria	European smoketree	NI
Deschampsia danthonioides	Annual hairgrass, annual hair grass	FACW
Descurainia sophia	Herb sophia	NI
Distichlis spicata	Salt grass	FACW
Downingia insignis	harlequin Calico-Flower	OBL
Eleocharis palustris	Common spikerush	OBL
Elymus caput-medusae	Medusa head	NI
Elymus cinereus	Great Basin wild rye	FAC
Elymus elymoides	Squirrel tail grass, squirreltail	FACU
Elymus hispidus	Intermediate wheatgrass	NI

Scientific Name	Common Name	Indicator
Elymus ponticus	tall wheat grass	NI
Elymus spicatus	Blue bunch wheat grass	NI
Elymus trachycaulus	Slender wheatgrass	FAC
Elymus triticoides	Beardless wild rye	FAC
Epilobium brachycarpum	Willow herb	FAC
Equisetum arvense	Common horsetail	FAC
Equisetum laevigatum	Smooth scouring rush	FACW
Ericameria nauseosa	Rubber rabbitbrush	NI
Eriogonum vimineum	Wicker stemmed eriogonum, wicker-stem wild buckwheat	NI
Eriophyllum lanatum	Wooly sunflower, common woolly sunflower	NI
Erodium cicutarium	Coastal heron's bill, redstem filaree	NI
Eschscholzia californica	California poppy	NI
Euthamia occidentalis	Western goldenrod	FACW
Festuca sp.	Fescue	NI
Galium sp.	Galium	NI
Gnaphalium palustre	Lowland cudweed	FACW
Helianthus annuus	Hairy leaved sunflower	FACU
Holosteum umbellatum	Jagged chickweed	NI
Hordeum brachyantherum	Meadow barley	FACW
Hordeum jubatum	Fox tail barley	FAC
Hordeum murinum	Foxtail barley, wall barley	FAC
Hosackia oblongifolia var. *oblongifolia*	Narrow leaved lotus	OBL
Iva axillaris	Povertyweed, poverty weed	FACU
Juncus balticus	Wire rush	FACW
Juniperus communis	common juniper	UPL
Lactuca serriola	Prickly lettuce	FACU
Lagophylla ramosissima	Common hareleaf	NI
Lepidium latifolium	Perennial pepperweed	FAC
Lepidium perfoliatum	Klamath pepper grass	FACU
Lotus corniculatus	Bird's foot trefoil, bird's-foot trefoil	FAC
Lycium barbarum	Matrimony vine	NI
Malva neglecta	Dwarf mallow, Common mallow	NI
Matricaria discoidea	Pineapple weed, pineapple weed, rayless chamomile	FACU
Medicago lupulina	Black medick	FACU
Medicago sativa	Alfalfa	UPL
Melilotus officinalis	Yellow sweetclover	FACU
Mentzelia laevicaulis	Giant blazingstar	NI
Microsteris gracilis	Slender phlox	FACU
Nicotiana attenuata	Coyote tobacco	FACU

Scientific Name	Common Name	Indicator
Onopordum acanthium subs. *acanthium*	Scottish thistle	NI
Parthenocissus quinquefolia	Virginia creeper	FAC
Phalaris arundinacea	Reed canary grass	FACW
Poa annua	Annual blue grass	FAC
Poa bulbosa	Bulbous blue grass	FACU
Poa pratensis	Kentucky blue grass	FAC
Poa secunda	Pine bluegrass, Nevada blue grass	FACU
Polygonum aviculare	Prostrate knotweed, knotweed, knotgrass	FAC
Polypogon monspeliensis	Annual beard grass, annual beard grass, rabbitfoot grass	FACW
Populus fremontii	Fremont cottonwood	NI
Portulaca oleracea	Common purslane	FAC
Prunus virginiana var. *demissa*	Western choke cherry	NI
Pseudoroegneria spicata ssp. *inermis*	Beardless wheatgrass	NI
Psilocarphus brevissimus	Woolly marbles	FACW
Purshia tridentata	Antelope bush, bitterbrush	NI
Ranunculus testiculatus	Tubercled crowfoot	NI
Ratibida columnifera	Upright prairie coneflower	NI
Ribes aureum	Golden currant	FAC
Ribes aureum var. *aureum*	Golden currant	NI
Robinia pseudoacacia	Black locust	FACU
Rosa woodsii	Woods' rose	FACU
Rumex crispus	Curly dock	FAC
Rumex salicifolius	Willow leaved dock, willow dock	FACW
Salix exigua	Narrowleaf willow	FACW
Salsola tragus	Russian thistle, Russian thistle, tumbleweed	FACU
Sarcobatus vermiculatus	Greasewood	FACU
Schoenoplectus acutus var. *occidentalis*	Tule, common tule	NI
Secale cereale	Rye	NI
Senecio sp.		NI
Sisymbrium altissimum	Tumble mustard	FACU
Sonchus asper	Spiny sowthistle	FACU
Taraxacum officinale	Red seeded dandelion, common dandelion	FACU
Taraxia tanacetifolia	Tansy leaf evening primrose	FACU
Thlaspi arvense	Fan weed	UPL
Toxicoscordion paniculatum	Foothill deathcamas	NI
Tragopogon dubius	Goat's beard, yellow salsify	NI
Tribulus terrestris	Puncture vine	NI
Typha latifolia	Broadleaf cattail, broad-leaved cattail	OBL
Ulmus pumila	Siberian elm	UPL

Scientific Name	Common Name	Indicator
Urtica dioica, L. ssp. *Holosericea*	hoary nettle	FAC
Verbascum thapsus	Woolly mullein	FACU
Xanthium strumarium	Cocklebur	FAC

[1] The PLANTS Database provides standardized information about the vascular plants, mosses, liverworts, hornworts, and lichens of the U.S. and its territories.

[2] CA Invasive plant list from Cal-IPC.

[3] Native species export.

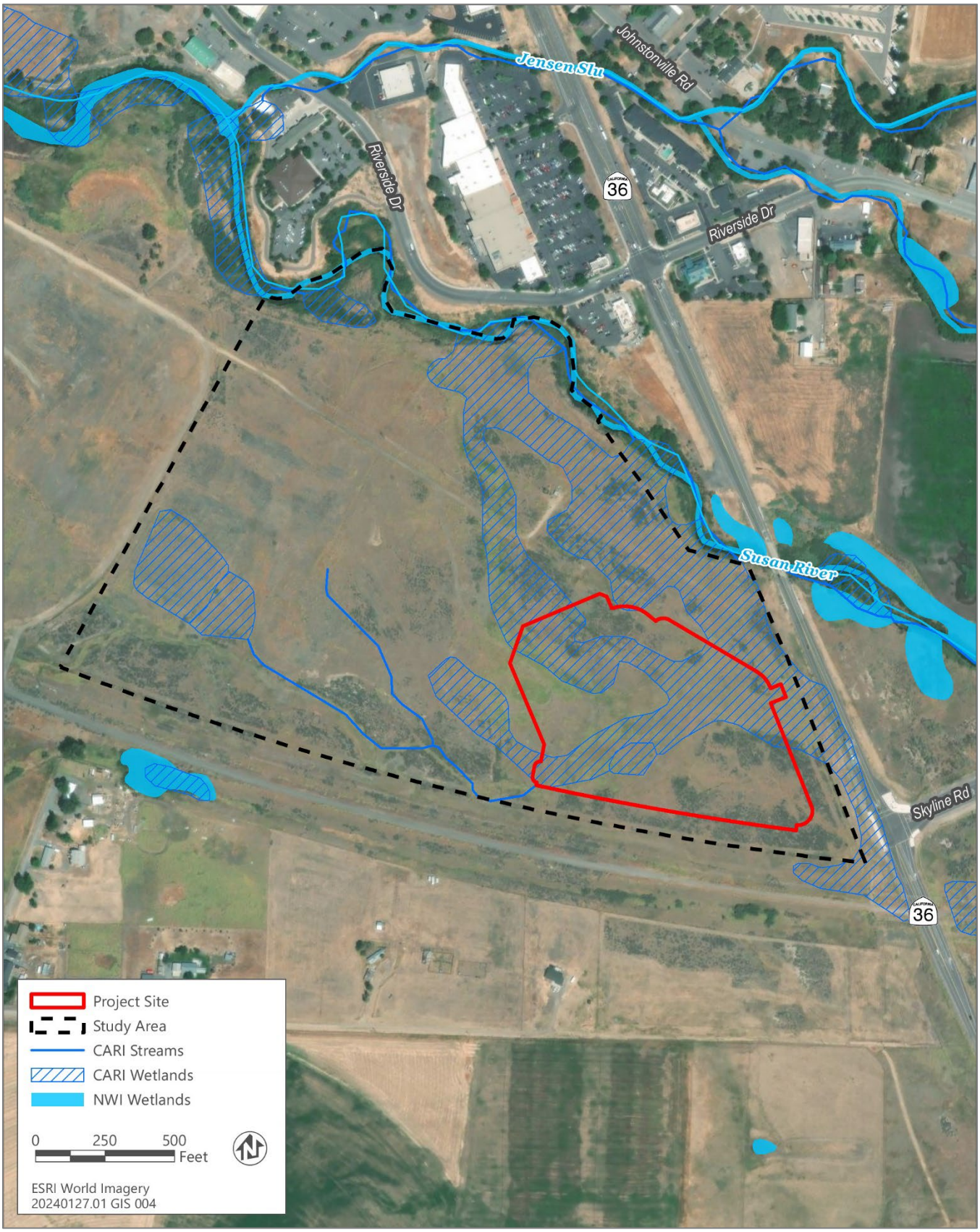
[4] The NWPL (and the information implied by its wetland plant species status ratings) is used extensively in wetland delineation, wetland restoration and research, and the development of compensatory mitigation goals, as well as in providing general botanical information about wetland plants.

[5] These species code files contain the presently accepted scientific and common names for vascular plants, mosses and lichens of British Columbia. The liverworts and hornworts included on this list are from the North American lists as a B.C. list does not exist. All species are given a 7 or 8 character code for use in database applications. In addition, commonly used species synonyms are included to assist in determining the presently accepted name. Version 14 (2020) Requested by CORE Geomatics.

Sources: The PLANTS Database 2020; Cal-IPC 2024; Jepson eFlora 2024; 2020 National Wetland Plant List 2022; British Columbia Forest Service Biogeoclimactic Ecosystem Classification Program 2024.

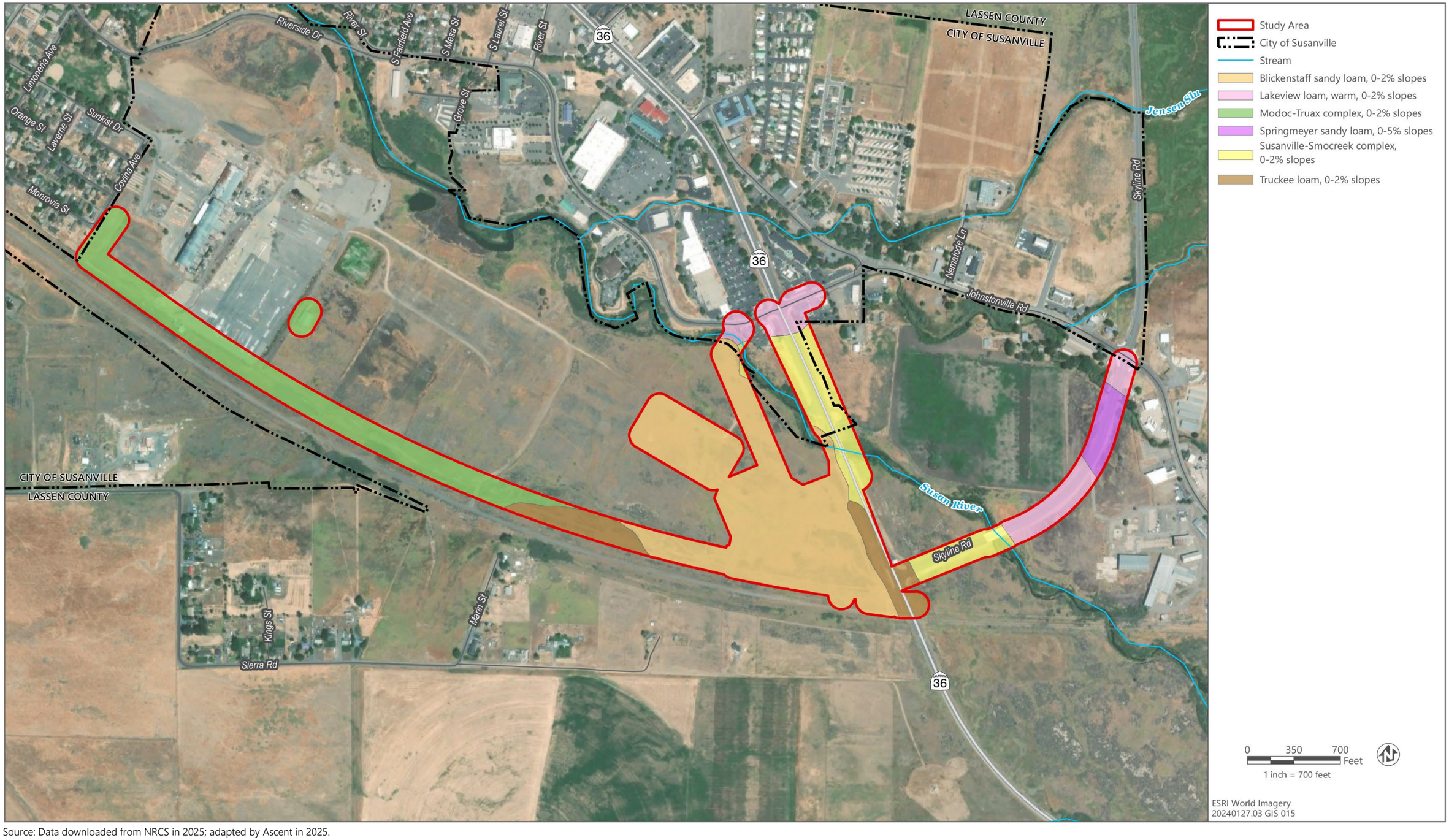
Appendix D

Supporting Maps



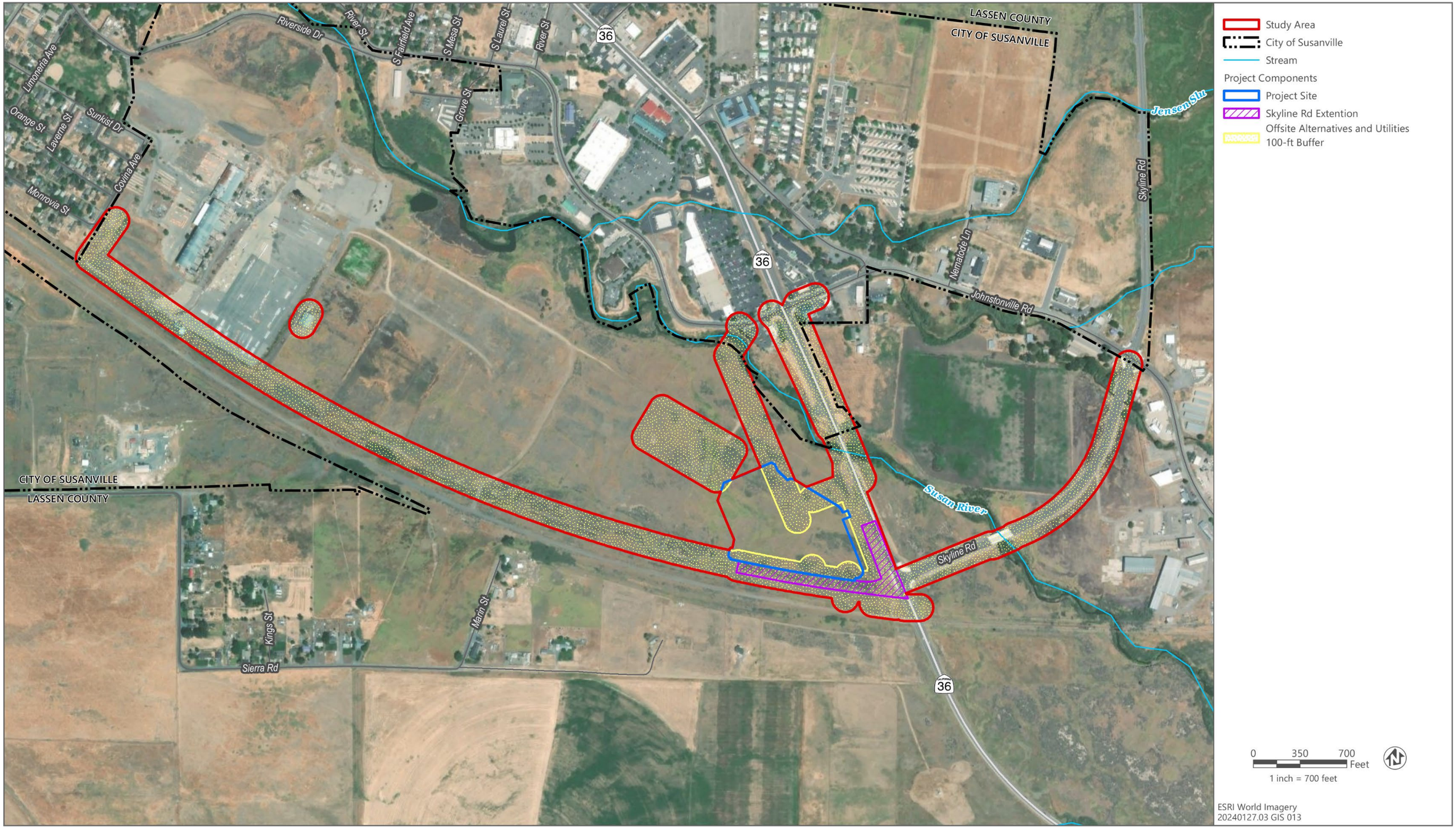
Source: Data collected by Ascent in 2024; adapted by Ascent in 2024.

Potential Wetlands



Source: Data downloaded from NRCS in 2025; adapted by Ascent in 2025.

Soils



Source: Adapted by Ascent in 2025.

Aerial of Study Area

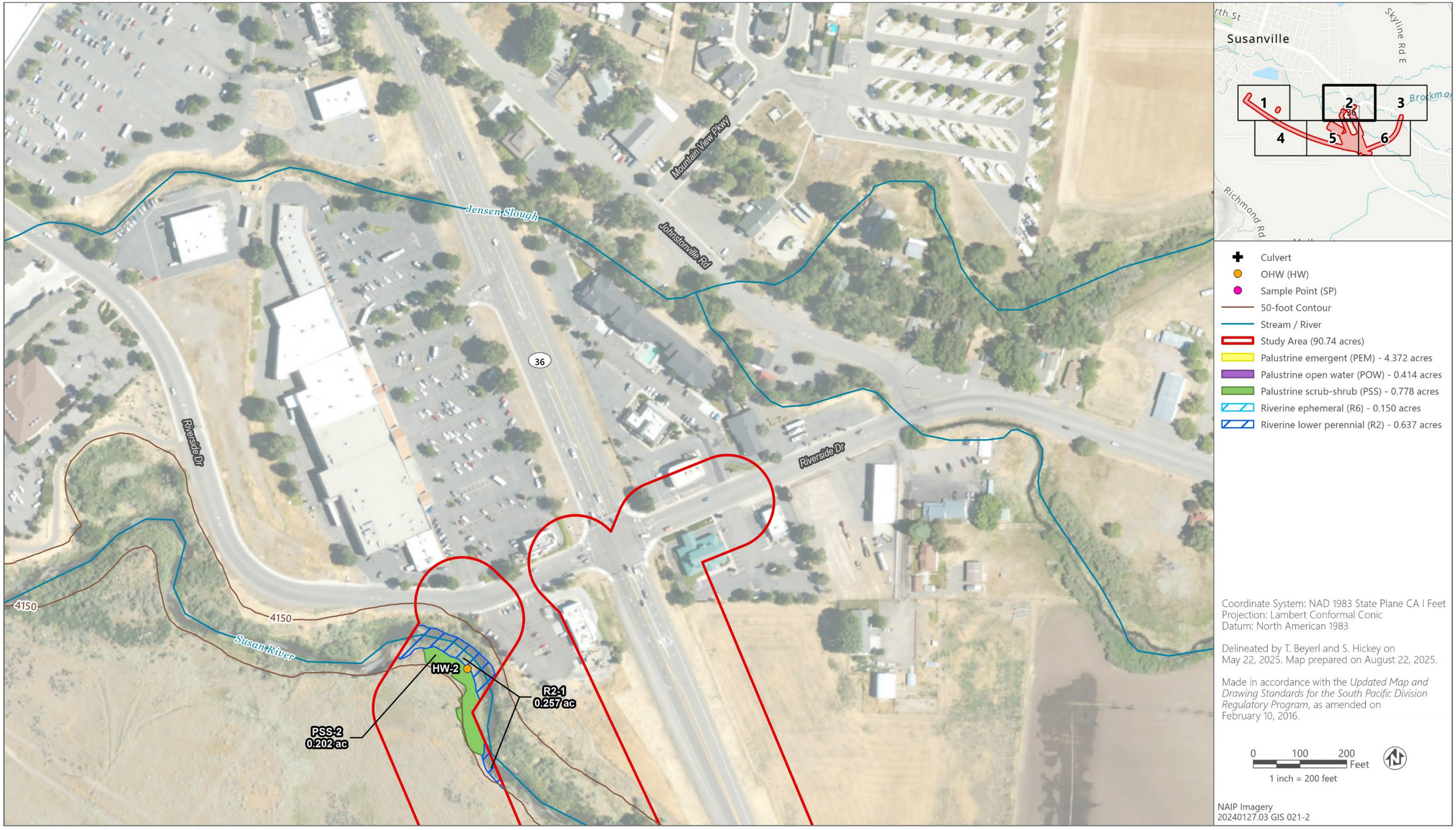
Appendix E

Aquatic Resource Delineation Maps



Source: Data collected by Ascent in 2025; adapted by Ascent in 2025.

Map 1 of 6



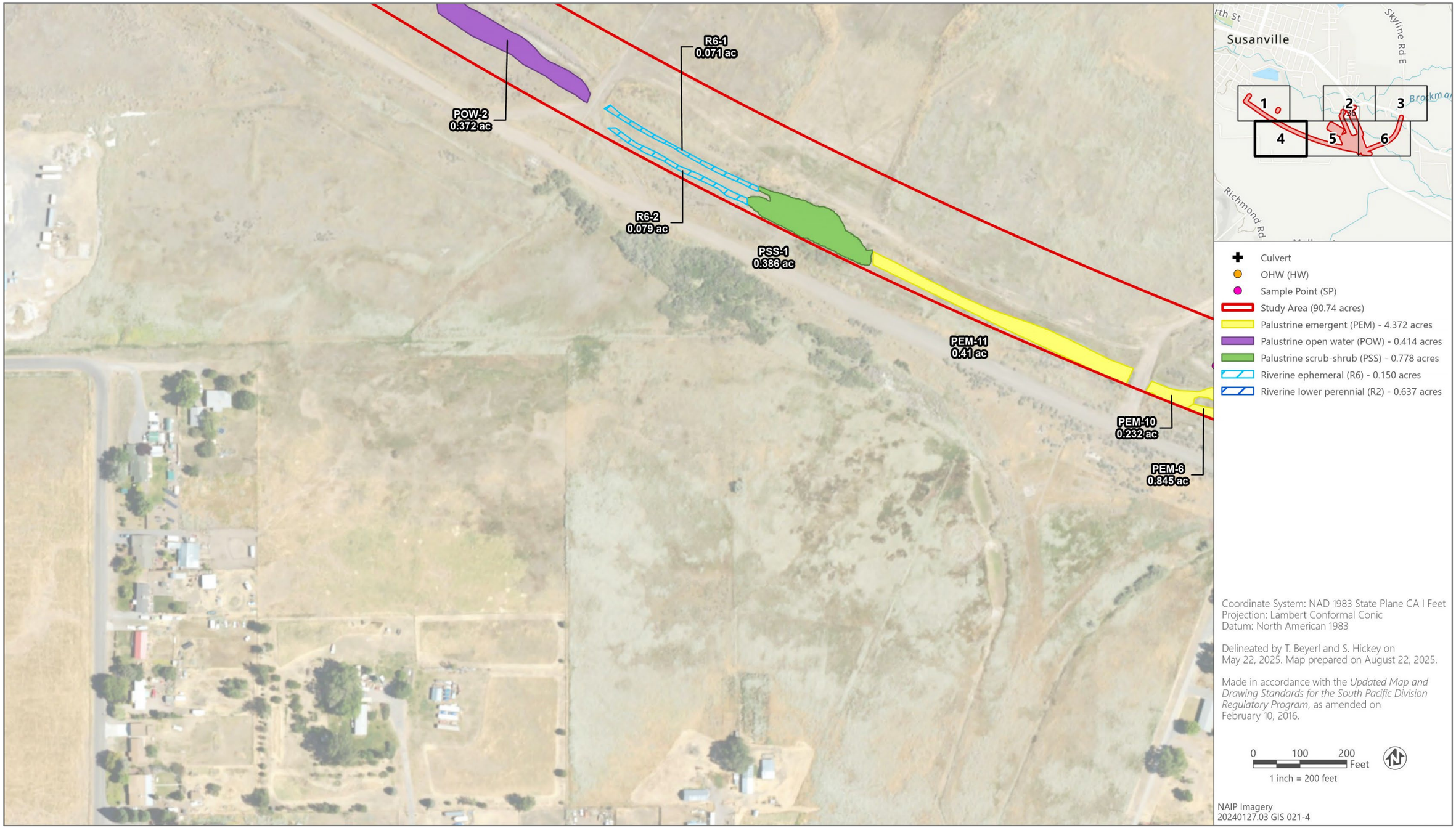
Source: Data collected by Ascent in 2025; adapted by Ascent in 2025.

Map 2 of 6



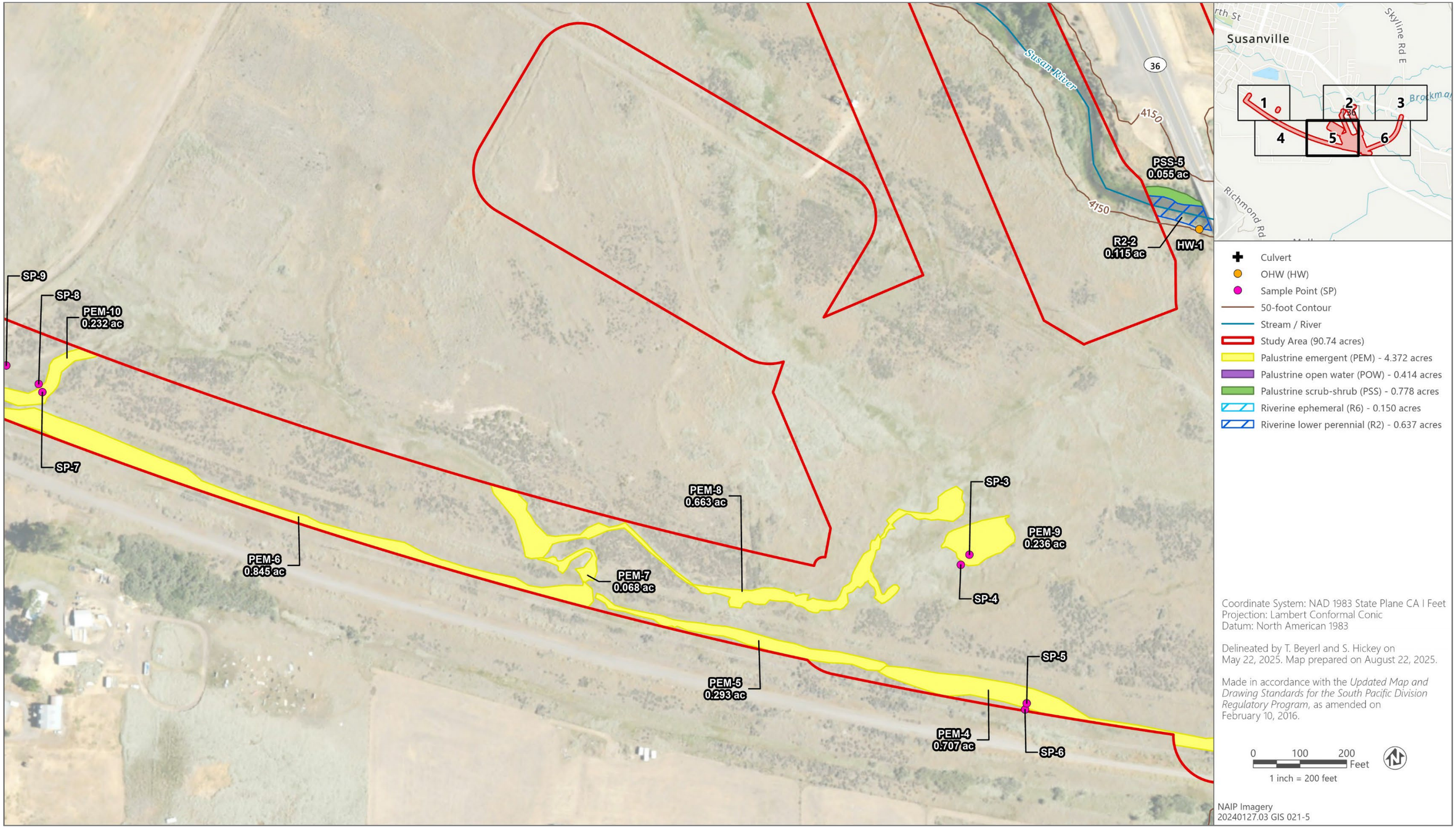
Source: Data collected by Ascent in 2025; adapted by Ascent in 2025.

Map 3 of 6



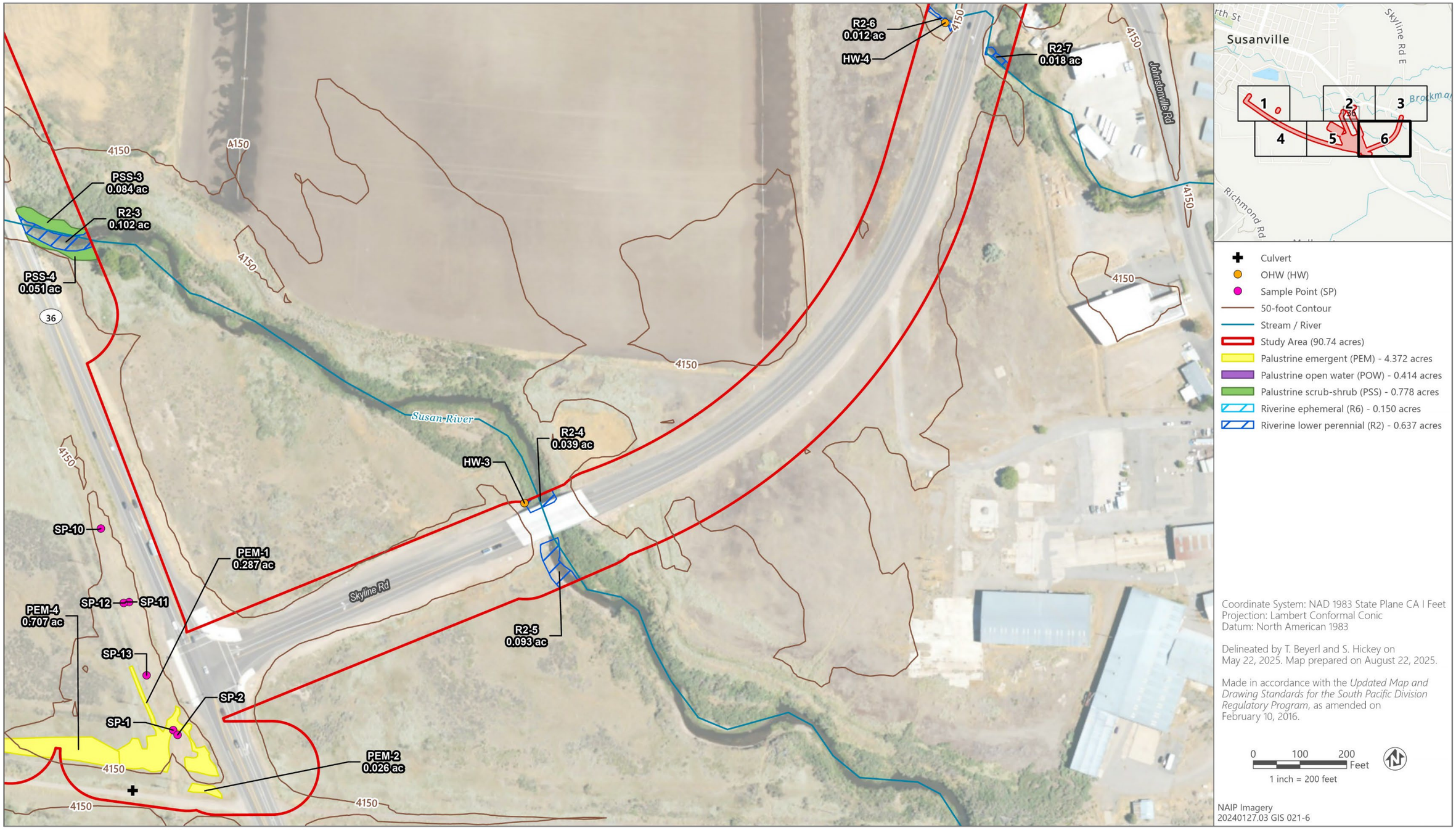
Source: Data collected by Ascent in 2025; adapted by Ascent in 2025.

Map 4 of 6



Source: Data collected by Ascent in 2025; adapted by Ascent in 2025.

Map 5 of 6



Source: Data collected by Ascent in 2025; adapted by Ascent in 2025.

Map 6 of 6

Appendix F

Representative Photographs



Source: Ascent in 2025.

Representative photo of palustrine emergent wetland, persistent at PEM-1.
Facing north. Taken April 2025.

Representative Site Photographs



Source: Ascent in 2025.

Representative photo of palustrine emergent wetland, nonpersistent at PEM-2. Facing north. Taken April 2025.

Representative Site Photographs



Source: Ascent in 2025.

Representative photo of palustrine emergent wetland, nonpersistent at PEM-9. Facing north. Taken April 2025.



Source: Ascent in 2025.

Photo of soil pit, SP-7. Taken April 2025.

Representative Site Photographs



Source: Ascent in 2025.

Representative photo of palustrine scrub shrub at PSS-1. Facing west.
Taken April 2025.

Representative Site Photographs



Source: Ascent in 2025.

Representative photo of palustrine open water at POW-2. Facing west.
Taken April 2025.

Representative Site Photographs



Source: Ascent in 2025.

Photo of soil pit at SP-1. Taken April 2025.

Representative Site Photographs

Appendix G

Aquatic Resources Excel Spreadsheet

Waters_Name	State	Cowardin_Code	HGM_Code	Meas_Type	Amount	Units	Waters_Type	Latitude	Longitude
R2-1	CALIFORNIA	R2		Linear	217.77		A1-1.TNW-404	40.40515118	-120.63404483
R2-2	CALIFORNIA	R2		Linear	121.12		A1-1.TNW-404	40.40282178	-120.63143874
R2-3	CALIFORNIA	R2		Linear	153.9		A1-1.TNW-404	40.40266594	-120.63077340
R2-4	CALIFORNIA	R2		Linear	26.45		A1-1.TNW-404	40.40107704	-120.62709186
R2-5	CALIFORNIA	R2		Linear	105.1		A1-1.TNW-404	40.40070639	-120.62697903
R2-6	CALIFORNIA	R2		Linear	65.97		A1-1.TNW-404	40.40387472	-120.62395219
R2-7	CALIFORNIA	R2		Linear	59.83		A1-1.TNW-404	40.40364179	-120.62352964
R6-1	CALIFORNIA	R6		Linear	368.61		DELIN.CONC	40.40335043	-120.64457555
R6-2	CALIFORNIA	R6		Linear	330.53		DELIN.CONC	40.40324431	-120.64457500
PEM-1	CALIFORNIA	PEM		Area	0.29		NON-WOTUS-WET.NEGATIVE.A4	40.39966913	-120.63002570
PEM-2	CALIFORNIA	PEM		Area	0.03		NON-WOTUS-WET.NEGATIVE.A4	40.39941383	-120.62970370
PEM-3	CALIFORNIA	PEM		Area	0.6		NON-WOTUS-WET.NEGATIVE.A4	40.40615981	-120.65043190
PEM-4	CALIFORNIA	PEM		Area	0.71		NON-WOTUS-WET.NEGATIVE.A4	40.40003745	-120.63294890
PEM-5	CALIFORNIA	PEM		Area	0.29		NON-WOTUS-WET.NEGATIVE.A4	40.40034673	-120.63473610
PEM-6	CALIFORNIA	PEM		Area	0.84		NON-WOTUS-WET.NEGATIVE.A4	40.40148640	-120.63953570
PEM-7	CALIFORNIA	PEM		Area	0.07		NON-WOTUS-WET.NEGATIVE.A4	40.40075377	-120.63607990
PEM-8	CALIFORNIA	PEM		Area	0.66		NON-WOTUS-WET.NEGATIVE.A4	40.40063009	-120.63496210
PEM-9	CALIFORNIA	PEM		Area	0.24		NON-WOTUS-WET.NEGATIVE.A4	40.40091445	-120.63301510
PEM-10	CALIFORNIA	PEM		Area	0.23		NON-WOTUS-WET.NEGATIVE.A4	40.40183746	-120.64040300
PEM-11	CALIFORNIA	PEM		Area	0.41		NON-WOTUS-WET.NEGATIVE.A4	40.40228827	-120.64202140
PSS-1	CALIFORNIA	PSS		Area	0.38		NON-WOTUS-WET.NEGATIVE.A4	40.40289931	-120.64357779
PSS-2	CALIFORNIA	PSS		Area	0.2		A4-1.ADJ.WET.A1-TNW-404	40.40477145	-120.63387840
PSS-3	CALIFORNIA	PSS		Area	0.08		A4-1.ADJ.WET.A1-TNW-404	40.40275626	-120.63083952
PSS-4	CALIFORNIA	PSS		Area	0.05		A4-1.ADJ.WET.A1-TNW-404	40.40256366	-120.63061016
PSS-5	CALIFORNIA	PSS		Area	0.05		A4-1.ADJ.WET.A1-TNW-404	40.40291984	-120.63149646
POW-1	CALIFORNIA	POW		Area	0.04		NON-WOTUS-WET.NEGATIVE.A4	40.40495719	-120.64831413
POW-2	CALIFORNIA	POW		Area	0.37		NON-WOTUS-WET.NEGATIVE.A4	40.40399340	-120.64589370
D-1	CALIFORNIA	R6		Area	0.03		B3-EXCL-DITCH	40.40650541	-120.65055669
D-2	CALIFORNIA	R6		Area	0.02		B3-EXCL-DITCH	40.40705616	-120.65112676
D-3	CALIFORNIA	R6		Area	0.03		B3-EXCL-DITCH	40.40733853	-120.65077529
Pit-1	CALIFORNIA	POW		Area	0.25		B7-EXCL-WTF.DEP	40.40379096	-120.64485926
Pit-2	CALIFORNIA	POW		Area	0.14		B7-EXCL-WTF.DEP	40.40764828	-120.65044743
AW-1	CALIFORNIA	U		Area	0.11		DRY.LAND	40.40204766	-120.64033227
AW-2	CALIFORNIA	U		Area	0.02		DRY.LAND	40.40050434	-120.63024079
AW-3	CALIFORNIA	U		Area	0.03		DRY.LAND	40.40034895	-120.63025085
AW-4	CALIFORNIA	U		Area	0.02		DRY.LAND	40.40011964	-120.63014667
AW-5	CALIFORNIA	U			0.01		DRY.LAND	40.40095719	-120.63046391

Appendix H

Excluded Features Map



Source: Data collected by Ascent in 2025; adapted by Ascent in 2025.

Map 1 of 6



Source: Data collected by Ascent in 2025; adapted by Ascent in 2025.

Map 2 of 6



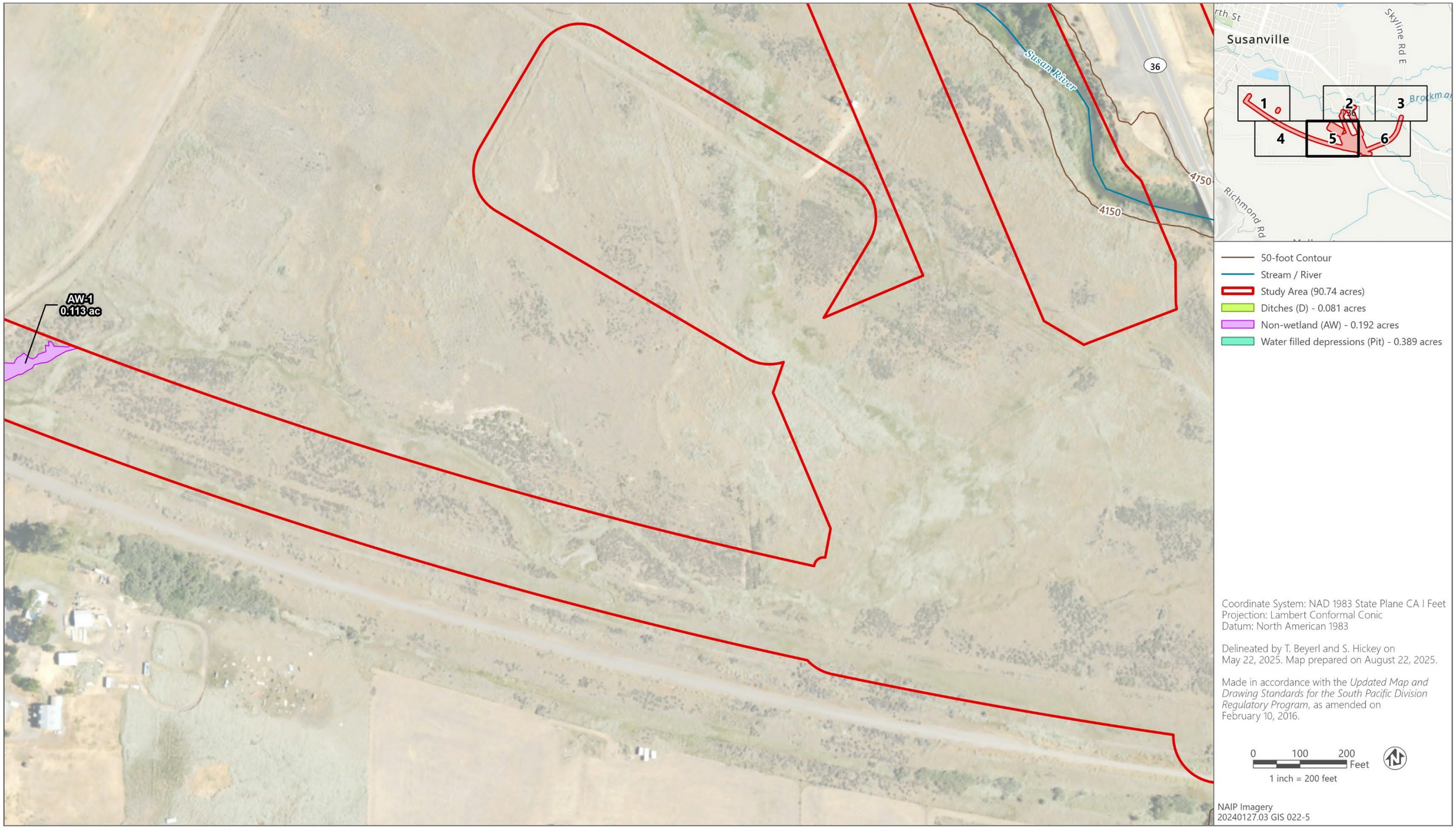
Source: Data collected by Ascent in 2025; adapted by Ascent in 2025.

Map 3 of 6



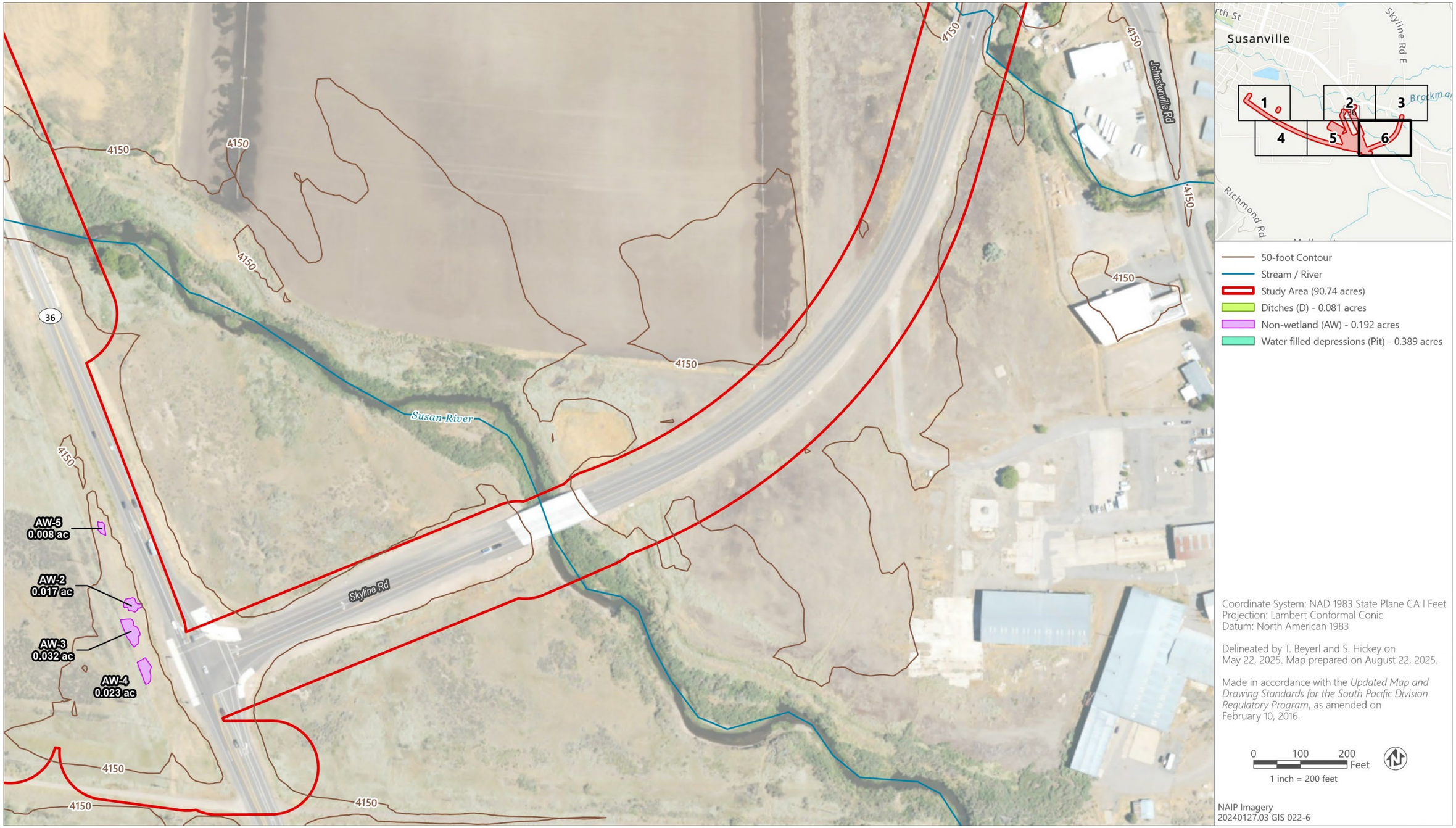
Source: Data collected by Ascent in 2025; adapted by Ascent in 2025.

Map 4 of 6



Source: Data collected by Ascent in 2025; adapted by Ascent in 2025.

Map 5 of 6



Source: Data collected by Ascent in 2025; adapted by Ascent in 2025.

Map 6 of 6

Appendix I

Signed Right of Entry from
Property Owner(s)

Appendix F

Cultural Resources Technical Report

Cultural Resources Technical Report for the Susanville Travel Stop Project

Prepared for:

City of Susanville
66 N. Lassen Street
Susanville, CA 96130

May 2025

Cultural Resources Technical Report for the Susanville Travel Stop Project

Prepared for:

City of Susanville
66 N. Lassen Street
Susanville, CA 96130

Contact:

Mr. Dan Newton
City Manager
Susanville, CA 96130
66 N. Lassen Street
Office: (530) 252-5102
Fax: (530) 252-5109

Prepared by:

Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

Contact:

Roberto Mora, RPA

May 2025

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LIST OF ABBREVIATIONS

APE	Area of Potential Effect
APN	assessor's parcel number
CEQA	California Environmental Quality Act
CFR	Code Federal Regulations
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
CRTR	cultural resources technical report
DPR	California Department of Parks and Recreation
MLD	Most Likely Descendant
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NEIC	Northeast Information Center
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
PRC	Public Resources Code
SHPO	State Historic Preservation Officer
SLF	Sacred Lands File
USC	US Code
USGS	US Geological Survey

EXECUTIVE SUMMARY

PURPOSE AND SCOPE

Ascent has prepared a cultural resources technical report (CRTR) in support of the Susanville Travel Stop Project (project) located on the southern city limits of Susanville in Lassen County. The tasks completed in support of the CRTR included a cultural resources literature search, a Sacred Lands File (SLF) search, tribal outreach, development of an Area of Potential Effect (APE), development of an Area of Direct Impact (ADI), geoarchaeological sensitivity analysis, an intensive pedestrian survey of the ADI, and a potential impact assessment. This CRTR was completed in compliance with Section 15064.5(a)(2)-(3) of the California Environmental Quality Act (CEQA) Guidelines and Section 106 of the National Historic Preservation Act (NHPA; 36 CFR Part 800, as revised), as a Clean Water Act Section 404 Permit from the US Army Corps of Engineers may be required. The presence of, or the potential for the presence of, tribal cultural resources as defined by California Public Resources Code (PRC) Section 21074, is not addressed.

FINDINGS OF THE INVESTIGATION

The California Historical Resources Information System (CHRIS) records search indicated that two previous investigations have occurred within the APE covering approximately one percent; an additional seven investigations have occurred within one-half-mile of the APE (Appendix A). The CHRIS search did not identify any previously recorded resources within the APE. In addition, two previously recorded resources are located within the one-half mile radius of the APE.

The SLF database search conducted by the Native American Heritage Commission (NAHC) returned positive results for Native American resources within the vicinity of the APE (Appendix B). Tribal representatives who may have knowledge of cultural resources within the APE per the NAHC were sent information requests on December 19, 2024. A follow up email was sent on January 8, 2025. No requests for Section 106 coordination were received. AB 52 is a government to government (agency to tribe) consultation effort, and is therefore not discussed in this document.

A pedestrian survey of the APE was conducted by Roberto Mora, RPA, on December 7, 2024. No cultural resources were identified as a result of the pedestrian survey.

CONCLUSIONS AND RECOMMENDATIONS

No unique archaeological sites, historical resources, or historic properties were identified within the ADI as a result of the background research and pedestrian survey completed for the project. As such, a finding of no historic properties affected is recommended under Section 106 and a finding of no impact to historical resources is recommended under CEQA. In addition, the analysis of the geologic data for the APE indicates there is a moderate possibility for the presence of buried archaeological resources to be present within the APE. To avoid significant impacts to previously unidentified cultural resources during project activities, including the inadvertent discovery of human remains, the following measures are recommended:

- Worker Awareness Training: All crew members and contractors conducting ground disturbing activities will be trained on the protection of sensitive archaeological, historical, and tribal cultural resources prior to commencing any ground disturbance. Workers will be trained to halt work if cultural resources are encountered during ground disturbance activities. Workers will be instructed to not return to work in the location of the find until instructed to do so by management.
- Inadvertent Discoveries – Archaeological Resources: If archaeological materials are inadvertently discovered during ground-disturbing activities, including midden soils, stone tools, chipped stone, baked clay, or concentrations of shell, bone, charcoal, glass, metal, or ceramics, all work shall cease within 100 feet (30.5 meters) of the find and the services of a professional archaeologist shall be retained immediately. At that time, the City of Susanville shall coordinate any necessary investigation of the site with the archaeologist as needed to evaluate

the significance of the resource per PRC Section 5024.1 and 21083.2(g) and provide proper management recommendations. If the find is determined to be a historical resource and/or a unique archeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures and/or mitigation shall be made available. Possible management recommendations for significant resources could include resource avoidance or data recovery excavations. If the qualified archaeologist determines the archaeological material to be Native American in nature, the applicant and the City shall contact the appropriate Native American tribe(s) for their input on the preferred treatment of the find. The contractor shall implement any measures deemed necessary by the archeologist and/or tribe for the protection of the cultural resources. Do not resume work in the area of the discovery until directed to do so by the archaeologist.

- Inadvertent Discovery of Human Remains: If human remains are discovered during construction activities, work within 100 feet (30 meters) of the remains shall be stopped immediately, and the project proponent shall notify the Lassen County Coroner, in accordance with Section 5097.98 of the PRC and Section 7050.5 of California's Health and Safety Code. If the remains are determined by the coroner to be Native American, the coroner will notify the Native American Heritage Commission within 24 hours, and they will designate a Most Likely Descendant (MLD). Together the landowner and the MLD shall determine the ultimate treatment and disposition of the remains in accordance with PRC Section 5097.94.

DISPOSITION OF DATA

This report will be filed with the Northeast Information Center (NEIC) at California State University, Chico, and Ascent's office in Sacramento. All field notes and other documentation related to this CRTR are on file at Ascent's office in Sacramento.

PERSONNEL QUALIFICATIONS

Roberto Mora has over 10 years of cultural resource management experience in throughout the western United States. He has served as the lead archaeological technician and co-field director on a variety of project types. Roberto has expertise in precontact archaeology of the Great Basin and California, human osteology, faunal remains, monitoring, survey and excavation methods, and laboratory analysis. His experience includes archaeological survey, monitoring, excavation, laboratory processing and cataloging, report writing, and data recovery of precontact and historic-era archaeological sites. Roberto meets the Secretary of the Interior's Standards for archaeology and the Caltrans Professional Qualification Standards as a principal investigator in precontact archaeology.

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1 INTRODUCTION

Lane Engineers, Inc. (applicant) is proposing to construct and operate a full-service travel stop located on vacant land to the southeast of the City of Susanville. Ascent completed this CRTR in compliance with Section 106 of the NHPA (36 Code Federal Regulations [CFR] Section 800), CEQA Section 21083.2 of the statute, and Section 15064.5 of the CEQA Guidelines. The tasks completed in support of the CRTR include a cultural resources literature search, a Sacred Lands File (SLF) search, tribal outreach, development of an APE, development of an ADI, geoarchaeological sensitivity analysis, an intensive pedestrian survey of the ADI, and a potential impact assessment.

1.1 PROJECT LOCATION AND DESCRIPTION

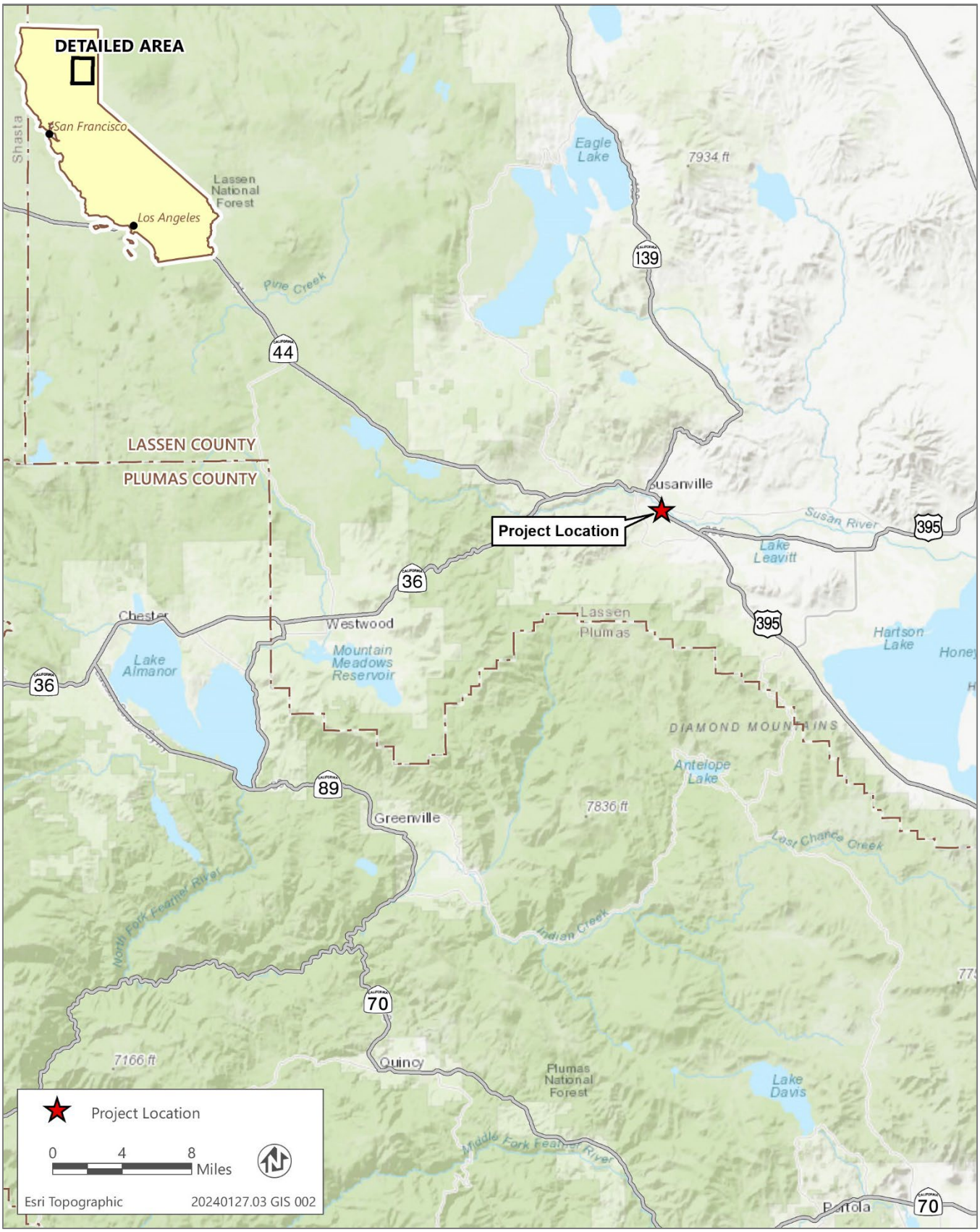
The project site (labeled as ADI for the purposes of this document) is approximately 14.15 acres, and part of a larger approximately 79.6-acre vacant parcel situated to the southeast of the City of Susanville (Figure 1-1). The project is located in unincorporated Lassen County that will be annexed into the City of Susanville. The ADI is part of a larger parcel (Assessor's Parcel Number 107-280-017), located immediately south of Susanville city limits and west of State Route (SR) 36 (Figure 1-2), although the remainder of the parcel would remain undeveloped.

The proposed project includes a travel stop, which would provide professional truck drivers and motorists with 24-hour access to purchase gasoline, diesel, propane, electronics, snacks, travel items, and food from two fast-food restaurants, one with drive-thru. A dog park, recreational vehicle (RV) dump station, bioretention basins, truck, RV and automobile parking areas and landscaping/lighting are also proposed, along with a 10-space overnight RV park. Project visitors/customers would include "over-the-road" trucks (i.e., professional long-haul drivers who are on the road for consecutive days or weeks at a time), traveling motorists, and local residents. Primary access to the project would be provided from SR 36 via an existing signalized intersection at SR 36 and Skyline Road but with a new dedicated exit lane southbound and a new northbound dedicated turn lane onto Skyline Road. Ingress/egress would be provided via two entry/exit points off Skyline Road, the first for RVs and automobiles and the second for trucks.

The project would include a 7,943-square-foot convenience store, one 1,588-square-foot fast-food option and another 3,474-square-foot fast-food restaurant with an external drive-through window. The convenience store and fast-food restaurants would occupy the same building, which would be located between the automobile and truck fueling stations and would be in the central portion of the project. The area north and east of the building would include automobile parking, with overnight RV parking to the very north; and the western and southwestern portions of the project site would consist of parking spaces for trucks. The auto fueling bays and diesel fueling bays would be accessible by separate entry points and physically separated by the building housing the fast-food restaurant and convenience store. Underground gasoline storage tanks would be in the northwest corner of the project and would consist of a 30,000-gallon tank for unleaded fuel, a 20,000-gallon split tank with 12,000 gallons of diesel for automobiles and 8,000 of premium unleaded for automobiles, and a 20,000-gallon diesel exhaust fluid tank for diesel exhaust fluid. Above-ground diesel storage tanks would be located in the same portion of the site and consist of four 12,000-gallon tanks to hold diesel.

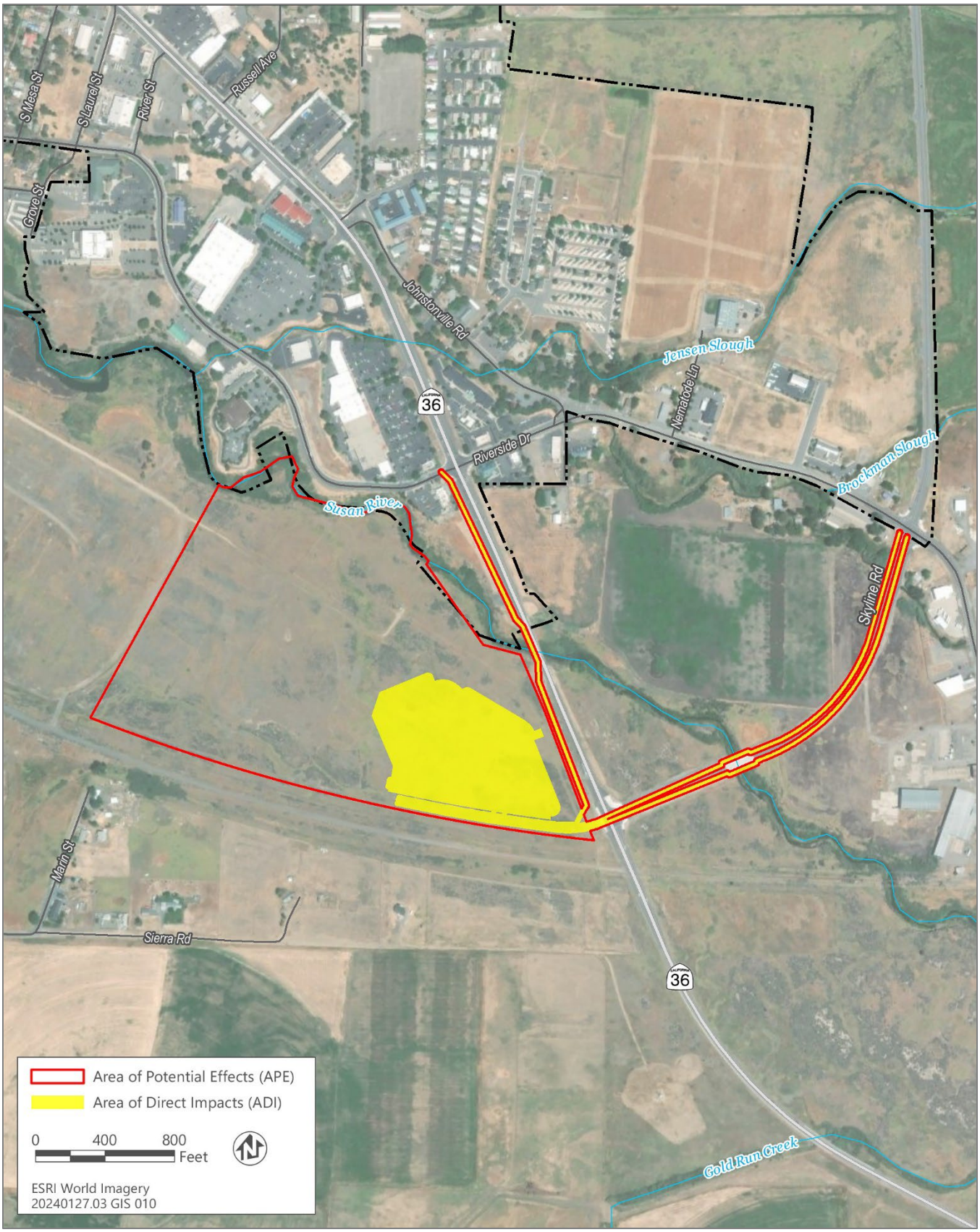
The project would include a variety of offsite improvements, including highway and street improvements and transitions, drainage facility connections, utility connections, and landscaping.

The existing SR 36/Skyline Road signalized intersection would be altered through extending Skyline Road to the west, to the westerly site access (solely for trucks). The end point of the road would be closed to traffic but left so that the future Skyline Road extension would not be precluded. The new western 'arm' of Skyline Road would have a dedicated left turn lane onto SR 36 (northbound) and a combined through traffic and right turn lane onto Skyline Road and SR 36 (southbound), respectively. From the north on SR 36 (southbound), the intersection would be altered to include a right exit lane towards the new Skyline Road 'arm' and restriped to include a dedicated left turn lane onto Skyline Road east and a dedicated through traffic lane. From the south on SR 36 (northbound), the intersection would be restriped to include a dedicated left turn lane on the new Skyline Road 'arm' to go with the existing through traffic and right turn lanes.



Source: Adapted by Ascent Environmental in 2024.

Figure 1-1 Regional Location



Source: Adapted by Ascent Environmental in 2025.

Figure 1-2 Area of Potential Effect (APE)

Skyline Road to the east of the existing junction would also be restriped to include a dedicated left turn lane on SR 36 (southbound), a right turn lane onto SR 36 (northbound) and a through traffic lane onto the new Skyline Road 'arm'.

The City of Susanville currently provides water and natural gas services to the city, the Susanville Sanitation District serves the city sewer, and electricity is provided by Lassen Municipal Utility District. Utilities would generally be brought to the site via a trench within the outer limits of the County/Caltrans right-of-way. Utilities such as water and gas would be brought to the site from Johnstonville Road via Skyline Road, via the east side of the road. The gas and water lines would be trenched either side of the Susan River but would be pumped through a pipe that would be hung from the side of the bridge on Skyline Road over the Susan River.

Currently, the preferred sewer line route would connect approximately at the SR 36/Riverside Drive intersection and be trenched either side of the Susan River but, with Caltrans permission and an encroachment permit in accordance with Caltrans standards, would be pumped through a pipe that would be hung from the side of the SR 36 bridge over the Susan River (Bridge 7-33), before tying in to the site via the proposed extension of Skyline Road.

1.2 AREA OF POTENTIAL EFFECT

The APE for the project encompasses 84.8 acres, which is larger than the area identified in the "Project Location and Description" (Section 1.1) because it includes potential offsite utility's locations that were included as part of the APE. The entirety of the APE would not be subject to ground disturbing activities. Out of the 84.8 acres, only 20.9 acres are proposed for development (ground disturbing activities). Therefore, an ADI was developed for the project (Figure 1-2). The maximum depth of disturbance is not expected to exceed 30 feet in the area of the underground storage tanks.

1.3 REGULATORY CONTEXT

1.3.1 Federal

NATIONAL HISTORIC PRESERVATION ACT

Historic properties are protected through the NHPA of 1966 (54 US Code [USC] 470f) and its implementing regulations (16 USC 470 et seq., 36 CFR 800, 36 CFR 60, and 36 CFR 63). The NHPA establishes the federal government's policy on historic preservation and the programs, including the NRHP, through which that policy is implemented. Under the NHPA, historic properties include "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places" (16 USC 470w (5)).

The formal criteria (36 CFR 60.4) for determining NRHP eligibility are as follows:

1) The property is at least 50 years old (however, properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP);
2) It retains integrity of location, design, setting, materials, workmanship, feeling, and associations; and
3) It possesses at least one of the following characteristics:

   Criterion A Is associated with events that have made a significant contribution to the broad patterns of history (events).

   Criterion B Is associated with the lives of persons significant in the past (persons).

   Criterion C Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction (architecture).

Criterion D Has yielded, or may be likely to yield, information important in prehistory or history (information potential).

For a property to retain and convey historic integrity it must possess most of the seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. Location is the place where the historic property was constructed or the place where a historic event occurred. Integrity of location refers to whether the property has been moved since its construction. Design is the combination of elements that create the form, plan, space, structure, and style of a property. Setting is the physical environment of a historic property that illustrates the character of the place. Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property. Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. Feeling is a property's expression of the aesthetic or historic sense of a particular period of time. This is an intangible quality evoked by physical features that reflect a sense of a past time and place. Association is the direct link between the important historic event or person and a historic property. Continuation of historic use and occupation help maintain integrity of association.

NATIONAL HISTORIC PRESERVATION ACT SECTION 106

Section 106 of the NHPA requires that federal agencies and entities that they fund or license consider the effects of their actions on properties that are listed in the NRHP or that may be eligible for such listing. To determine whether an undertaking could affect NRHP-eligible properties, cultural resources, including historical and architectural properties, must be inventoried and evaluated. Although compliance with Section 106 is the responsibility of the lead federal agency, others can conduct the work necessary to comply.

The Section 106 review process consists of the following four steps:

1) Initiate the Section 106 process by establishing the undertaking, developing a plan for public involvement, and identifying other consulting parties.
2) Identify historic properties (resources that are eligible for inclusion in the NRHP) by determining the scope of efforts, identifying cultural resources in the area potentially affected by the project, and evaluating resources' eligibility for NRHP inclusion.
3) Assess adverse effects by applying the Section 106 criteria of adverse effect to identified historic properties.
4) Resolve adverse effects by consulting with the State Historic Preservation Officer and other consulting agencies, including the Advisory Council on Historic Preservation if necessary, to develop an agreement that addresses the treatment of historic properties.

NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT

The Native American Graves Protection and Repatriation Act (NAGPRA) (Public Law 101-601, 25 U.S.C. 3001 et seq., 104 Stat. 3048), was enacted on November 16, 1990. It provides for the repatriation and disposition of certain Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony. By enacting NAGPRA, Congress recognized that human remains of any ancestry "must at all times be treated with dignity and respect." The law also acknowledges that human remains, and other cultural items of Native American origin (which includes Native Hawaiian origin), removed from Federal or tribal lands belong, in the first instance, to lineal descendants, Indian Tribes, and Native Hawaiian organizations. Federal agencies and museums, universities, state agencies, local governments, or any institution that receives Federal funds must comply with NAGPRA. NAGPRA also establishes penalties for both criminal and civil violations related to the illegal possession or sale, purchase, profit, or transportation for sale or profit, of Native American human remains or cultural items illegally obtained from federal lands or museums, among other instances. Due to the fact the proposed project is located on national forest lands, any Native American human remains and/or funerary objects, sacred objects, and objects of cultural patrimony discovered during project-related investigations or during project implementation would be subject to NAGPRA.

1.3.2 State

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

All properties in California that are listed in or formally determined eligible for listing in the NRHP are eligible for listing in the CRHR. The CRHR is a listing of State of California resources that are significant in the context of California's history. It is a Statewide program with a scope and with criteria for inclusion similar to those used for the NRHP. In addition, properties designated under municipal, or county ordinances are also eligible for listing in the CRHR.

A historic resource must be significant at the local, state, or national level under one or more of the criteria defined in the California Code of Regulations Title 15, Chapter 11.5, Section 4850 to be included in the CRHR. The CRHR criteria are tied to CEQA because any resource that meets the criteria below is considered a significant historical resource under CEQA. As noted above, all resources listed in or formally determined eligible for listing in the NRHP are automatically listed in the CRHR.

The CRHR uses four evaluation criteria for significance:

Criterion 1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

Criterion 2. Is associated with the lives of persons important to local, California, or national history.

Criterion 3. Embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of a master; or possesses high artistic values.

Criterion 4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

A property must have both significance and integrity to be considered eligible for listing in the CRHR. Loss of integrity, if sufficiently great, will overwhelm the historical significance of a resource and render it ineligible. Likewise, a resource can have complete integrity, but if it lacks significance, it must also be considered ineligible. Integrity is evaluated by regarding the property's retention of its location, design, setting, workmanship, materials, feeling, and association to its period of significance. These seven factors can be roughly grouped into three types of integrity considerations. Location and setting relate to the relationship between the property and its environment. Design, materials, and workmanship, as they apply to historic buildings, relate to construction methods and architectural details. Feeling and association are the least objective of the seven factors and pertain to the overall ability of the property to convey a sense of the historical time and place in which it was constructed.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA requires public agencies to consider the effects of their actions on "historical resources," and "unique archaeological resources." Pursuant to PRC Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Section 21083.2 requires agencies to determine whether projects would have effects on unique archaeological resources.

Historical Resources

"Historical resource" is a term with a defined statutory meaning (PRC Section 21084.1; State CEQA Guidelines Sections 15064.5[a] and [b]). Under State CEQA Guidelines Section 15064.5(a), historical resources include the following:

1) A resource listed in or determined to be eligible by the State Historical Resources Commission for listing in, the CRHR (PRC Section 5024.1).

2) A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g), will be presumed to be historically or culturally significant. Public agencies must treat any such

resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

3) Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be historically significant if the resource meets the criteria for listing in the CRHR (PRC Section 5024.1).

4) The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to PRC Section 5020.1[k]) or identified in a historical resources survey (meeting the criteria in PRC Section 5024.1[g]) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

Unique Archaeological Resources

CEQA also requires lead agencies to consider whether projects will affect unique archaeological resources. PRC Section 21083.2(g) states that "unique archaeological resource" means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria:

1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.

3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Mitigation of Impacts to Archaeological Resources

Treatment options under PRC Section 21083.2 (b) to mitigate impacts to archaeological resources include activities that preserve such resources in place in an undisturbed state. PRC Section 21083.2 states:

(a) As part of the determination made pursuant to Section 21080.1, the lead agency shall determine whether the project may have a significant effect on archaeological resources. If the lead agency determines that the project may have a significant effect on unique archaeological resources, the environmental impact report shall address the issue of those resources. An environmental impact report, if otherwise necessary, shall not address the issue of nonunique archaeological resources. A negative declaration shall be issued with respect to a project if, but for the issue of nonunique archaeological resources, the negative declaration would be otherwise issued.

(b) If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. Examples of that treatment, in no order of preference, may include, but are not limited to, any of the following:

   1) Planning construction to avoid archaeological sites.

   2) Deeding archaeological sites into permanent conservation easements.

   3) Capping or covering archaeological sites with a layer of soil before building on the sites.

   4) Planning parks, greenspace, or other open space to incorporate archaeological sites.

(c) To the extent that unique archaeological resources are not preserved in place or not left in an undisturbed state, mitigation measures shall be required as provided in this subdivision.

(d) Excavation as mitigation shall be restricted to those parts of the unique archaeological resource that would be damaged or destroyed by the project.

CALIFORNIA NATIVE AMERICAN HISTORICAL, CULTURAL, AND SACRED SITES ACT

The California Native American Historical, Cultural, and Sacred Sites Act (PRC Section 5097.9) applies to both State and private lands. The act requires, upon discovery of human remains, that construction or excavation activity cease and that the county coroner be notified. If the remains are those of a Native American, the coroner must notify the NAHC, which notifies (and has the authority to designate) the most likely descendants of the deceased. The act stipulates the procedures the descendants may follow for treating or disposing of the remains and associated grave goods.

HEALTH AND SAFETY CODE, SECTION 7050

Section 7050.5 of the Health and Safety Code requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If they are determined to be those of a Native American, the coroner must contact NAHC.

PUBLIC RESOURCE CODE SECTION 5097

PRC Section 5097 specifies the procedures to be followed in the event of the unexpected discovery of human remains on nonfederal land. The disposition of Native American human burials falls within the jurisdiction of the NAHC. Section 5097.5 of the Code states the following:

> No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

LOCAL

Susanville Vicinity Area Plan, Lassen County

Protect the planning area's historic and archaeological resources and encourage appropriate opportunities for public experience and academic study of these resources under controlled conditions.

Susanville General Plan 1990-2010

Goal 14. Promote a greater awareness of and sensitivity toward Susanville's archaeological heritage.
Policy ah. The City shall work with the County and cooperate with the CAI (California Archaeological Inventory) toward the protection and preservation of artifacts in those areas already identified as containing archaeological remains.
Policy ai. The City shall cooperate with the CAI in the development of information which will allow the prediction of additional sites likely to contain archaeological remains.
Action program [48]: Programs of public information will be initiated to make property owners aware of background data of archaeological significant structures or sites on their property.
Action program [49]: All development applications and public projects that require EIR's will routinely be sent to the "California Archaeological Inventory-Northeast Information Center" at the Department of Anthropology, Chico State University, for review and recommendations regarding archaeological findings.
Policy aj. The City shall take all possible precautions to ensure that no action by the City or County results in the loss of the irreplaceable archaeological record present in the City's planning jurisdiction, and shall work with the County toward that end.
Action Program [50]: The City shall promote the preservation of archaeological sites by considering any significant remains in its planning for parks.

Action program [51]: The City may permit land uses other than those designated on the General Plan Land Use and Circulation map on sites with archaeological merit, providing that the use allowed will not result in the loss of any archaeological record.
Action program [52]: Where an archaeological site is in proximity to a project under review, City staff in conjunction with CAI will determine the particular qualities to be preserved and the methods of preservation.

2 ARCHIVAL RESEARCH

2.1 RECORDS SEARCH

On November 26, 2024, a records search which included the ADI and a one-half-mile radius was completed at the NEIC, at California State University, Chico (File No. NE24-554; Appendix A). As part of the NEIC records search, the following information was reviewed:

- site records of previously recorded cultural resources,
- previous cultural studies,
- NRHP and CRHR listings,
- the California Historic Resources Inventory
- Built Environment Resource Directory for Lassen County
- Historical Maps [US Geological Survey (USGS) Topographic and GLO Plat maps]

Review of the NEIC records search results for the APE did not identify any previously recorded resources within the APE. In addition, two resources had been previously recorded within one-half-mile radius of the APE (Table 2-1). P-18-005680 is a bedrock milling feature, and P-18-001679 is a railroad grade and has associated features such as foundations, structure pads, and trash dumps. The records search also found that two previous investigations have occurred within the APE, which together cover approximately one percent of the APE (Table 2-2). In addition, seven investigations have occurred within one-half-mile of the APE (Table 2-3).

Table 2-1 Resources Outside the APE, Within One-Half-Mile Radius

Primary Number	Year/Author/Affiliation	Age	Attribute Codes	NRHP/CRHR Status
P-18-001679	1993 (E. Obermayr, D. Furlong, D. Weatherly, R. Ealy, J. Nelson, B. Norton, INFOTEC Research, Inc.); 1994 (Ron Reno, B. Mackey, L. Hause, Archaeological Research Services, Inc.); 1994 (Ron Reno, Archaeological Research Services, Inc.); 1999 (R. Scott Baxter, Kate Lanier, KEA Environmental, Inc.); 2001 (George Petershagen, California Department of Transportation); 2013 (Cassandra Hensher, Caltrans); 2017 (Andrea Maniery, PAR Environmental Services, Inc.)	Historic era	AH02 (Foundations/ structure pads); AH04 (Privies/dumps/trash scatters) - cans, glass, bottles & jars, ceramics; AH07 (Roads/trails/railroad grades) - railroad	Not evaluated
P-18-005680	2006 (M. Guerrero, K. Johnson, ECORP Consulting, Inc.)	Precontact	AP04 (Bedrock milling feature)	Not evaluated

Source: Compiled by Ascent 2025.

Table 2-2 Reports Within the APE

Report Number	Year	Author/Affiliation	Title	Percent within APE (Approx.)
007704	1989	Peter M. Jensen Jensen & Associates	Archaeological Inventory Survey in Conjunction With the Proposed Skyline Road Construction Project, Susanville, Lassen County, California	1%
010026	1983	James Johnson Mountain Anthropological Research	An Archaeological Reconnaissance of the City of Susanville Highway 36 Access Project, Lassen County, California	1%

Source compiled by Ascent 2024.

Table 2-3 Reports Outside the APE, Within One-Half-Mile Radius

Report Number	Year	Author/Affiliation	Title
001480	1996	Lisa S. Peak Peak & Associates	Cultural Resource Assessment of the Proposed Sierra View Subdivision Sewer Line and Historical Evaluation of the Cramer Ranch Complex, Lassen County, California
007702	1996	Michael F. Rondeau Caltrans	Negative Archaeological Report for the Construction of Acceleration and Deceleration Lanes on State Route 36, Lassen County, California
007705	1991	David Rhode N/A	Professional Archaeological Services and Techniques Cultural Resources Reconnaissance Report
011379	2011	Sean Jensen Genesis Society	Archaeological Survey, Kirack-Manning Industrial Development Project, c. 21-acres, Lassen County, California
012425	2013	Cassandra Hensher California Department of Transportation	Cultural Resources Screening Memo for Skyline South Rail Trail Project, Lassen County, California
013122	2014	Eric Pietz USDA-NRCS	Project #_14FY18-0013, Field Office Report on Cultural Resources Ground Survey Findings
013973	2017	Christina Alonso WSA, Inc.	An Archaeological Survey Report and Historic Properties Report for the Susanville Southeast Gateway, Lassen County, California

Source compiled by Ascent 2024.

2.2 OTHER SOURCES

Additional research included the review of historic USGS topographic maps from 1954 to 2021 (NETR 2024). Aerial imageries were not reviewed because all available aerials become available until 1981, all potential development within the project site would not be historic of age (45 years or older). GLO plat map were also reviewed; review of the 1864 plat map revealed that the APE was undeveloped (BLM 2024). The topographic maps did not reveal any development within the APE. The 1864 GLO plat map revealed an unnamed road adjacent. This road appears that it became the railroad that was revealed by the records search results (P-18-005680).

2.3 SACRED LANDS FILE SEARCH

Ascent requested a search of the SLF from the NAHC on October 29, 2024. Positive results were returned on November 6, 2024. Attached to the results was a list of Native American groups and individuals to contact who may also have knowledge of cultural resources in the APE. A summary of that outreach is included below. A copy of the NAHC response letter is included in Appendix B.

2.4 TRIBAL OUTREACH

Emails were sent to the 10 groups and individuals provided by the NAHC on December 19, 2024, to request information on cultural resources in the APE. The email included project information, a project map, and contact information. This outreach was conducted as part of the background research effort. Mr. Smith responded on behalf of the tribe on January 7, 2025, that the project lies outside their aboriginal lands and therefore has no comments. A follow-up request was sent on January 8, 2025, to the other eight tribal representatives. No responses from the other eight tribal representatives have been received to date. Table 2-4 provides a summary of who was contacted, how, when, and the response, if any. Copies of the tribal correspondence are included in Appendix B.

Table 2-4 Outreach Summary

Name and Title	Affiliation	Date and Medium of Initial Contact	Date and Medium of Follow-up Contact	Response Summary
Francis Steele, Chairperson, Chairperson	Berry Creek Rancheria of Maidu Indian	December 19, 2024 Email	January 8, 2025 Email	None to date.
Glenda Nelson, Chairperson	Estom Yumeka Maidu Tribe of the Enterprise Rancheria	December 19, 2024 Email	NA	See below.
Nelson Smith, Tribal Historic Preservation Officer	Estom Yumeka Maidu Tribe of the Enterprise Rancheria	December 19, 2024 Email	NA	Mr. Smith responded on behalf of the tribe on January 7, 2025, that the project lies outside their aboriginal lands and therefore has no comments.
Kyle Self, Chairperson	Greenville Rancheria of Maidu Indians	December 19, 2024 Email	January 8, 2025 Email	None to date.
Paul Garcia, Chairperson	Honey Lake Maidu	December 19, 2024 Email	January 8, 2025 Email	None to date.
Ron Morales, Chairperson	Honey Lake Maidu	December 19, 2024 Email	January 8, 2025 Email	None to date.
Guy Taylor, N/A	Mooretown Rancheria of Maidu Indians	December 19, 2024 Email	January 8, 2025 Email	None to date.
Benjamin Clark, Chairperson	Mooretown Rancheria of Maidu Indians	December 19, 2024 Email	January 8, 2025 Email	None to date.
Tina Goodwin, Chairperson	Pakan'yani Maidu of Strawberry Valley Rancheria	December 19, 2024 Email	January 8, 2025 Email	None to date.
Arian Hart, Tribal Chairman	Susanville Indian Rancheria	December 19, 2024 Email	January 8, 2025 Email	None to date.

Source compiled by Ascent 2025.

2.5 FIELD METHODS

An intensive pedestrian survey of the ADI was conducted on December 7, 2024, by Ascent staff Roberto Mora, R.P.A. All open areas where the ground was visible were closely examined. Special attention was given to bare patches of ground, exposed soils, rodent burrows, and dirt piles. The results of the surveys are detailed in Section 5.2.

3 ENVIRONMENTAL SETTING

The APE is located in the western edge of the Great Basin physiographic province adjacent to both the Sierra Nevada and Modoc Plateau provinces. The climate of the area is controlled by zonal circulation and topography producing a pattern of dry summer and wet winters. The annual precipitation is 16 inches. The project area is an old floodplain of the Susan River. The terrain of the APE is relatively flat, and the APE is directly adjacent to the Susan River.

The vegetation cover of the APE includes mesic and xeric grasses. Common mammals include deer, rabbits, squirrels, and rodents. Common birds include waterfowl, quail, dove, pigeon, and grouse (Johnston 1983).

3.1 GEOLOGY AND SOILS

The ground under the subject property is the Quaternary Lake Deposits (Mulvaney 2024). This area was likely the extension of Honey Lake and Lake Lahontan when the climate was wetter in the Late Pleistocene (11,000 to 30,000 years before present).

The surficial soils in the APE are comprised of Blickenstaff, Susanville, Truckee, Lakeview, and Springmeyer (UCD SoilWeb 2024).

- The Blickenstaff series consists of very deep, moderately well drained soils that formed in alluvium derived from granite. Blickenstaff soils are on stream terraces. Slopes are 0 to 2 percent.
- The Susanville series consists of very deep, moderately well drained soils that formed in mixed alluvium Susanville soils are on stream terraces. Slopes range from 0 to 2 percent.
- The Truckee series consist of very deep, poorly drained soils that formed in alluvium derived from mixed rocks. Truckee soils are on flood plains and stream terraces. Slopes are 0 to 2 percent.
- The Lakeview series consist of very deep and are derived from landscape (intermontane basins) and landform terraces (flood plains, alluvial fans, stream terraces). Slopes are 0 to 2 percent.
- The Springmeyer series consists of very deep, well drained soils that formed in alluvium derived from mixed igneous rocks. Springmeyer soils are on fan remnants and inset fans. Slopes are 0 to 50 percent.

4 CULTURAL SETTING

The following Native American precontact setting, ethnographic history information is based on the *Archaeological Survey Report Susanville Southeast Gateway, Lassen County, California, SR 36 PM 26.2 to PM 26.5, District 2, PPNO 3492,* prepared by WSA, Inc. (WSA 2017).

4.1 NATIVE AMERICAN PRECONTACT SETTING

The western Great Basin has been the focus of intensive and very productive archaeological research, although prior to the 1970s archaeological studies and dates tended to be site specific.

4.1.1 Early Holocene (10,000 to 7,000 BP)

The earliest period is the Early Holocene and dates between 10,000 to 7,000 before present (BP). Although these sites are rare, Early Holocene sites represent the earliest recorded occupation of the western Great Basin. Artifact assemblages associated with the Early Holocene compare to other early Great Basin assemblages, and are usually characterized by Great Basin Stemmed series projectile points, crescents, a variety of steep-sided formed flaked tools, and bifacial thinning debris.

4.1.2 Post-Mazama (7,000 to 5,000 BP)

Post-Mazama archaeological record transition between a "Pluvial Lakes Tradition" which characterizes the preceding Early Holocene Period, and one typical of the Great Basin Archaic. Components dating to this period include Northern Side-notched projectile points and a diffuse, but more varied assortment of hunting and processing tools typical of high residential mobility. Settlements began to move away from lake shores and towards more limited optimum subsistence localities such as the Sierran Front. These locations may have served as a refuge for geographically disparate populations at the height of mid-Holocene warming.

4.1.1 Early Archaic (5,000 to 3,500 BP)

The transition from Pre-Archaic to Archaic adaptive strategies most likely occurred in response to several factors that were centered around environmental fluctuations and ecological shifts, which took place during the Early Holocene. In the Honey Lake Basin, sites located in lakeshore contexts that had been the focus of previous occupations were now confined to nearby springs and pond areas where water supplies were perhaps more reliable. Compared to adaptive strategies of the Early Holocene, ground to flaked stone implements appear to have increased, suggesting a broadening of the subsistence base with a focus on the processing and storage.

Early Archaic processing assemblages from the Tuscarora Pipeline project do not contain sufficient data to allow comment on the character or intensity of vegetal processing activities. The existence of the "Milling Stone Horizon" in northeastern California, which he sees as a generalized hunting and gathering tradition geared toward the intensive exploitation of plant resources.

4.1.2 Middle Archaic (3,500 to 1,300 BP)

The Middle Archaic in the Lahontan Basin is thought to span the time period from approximately 3500 to 1300 BP and was associated with a cool, moist climatic interval. The transition between the Early and Middle Archaic is seen through a gradual shift in settlement/subsistence patterns along with the stylistic elaboration and increases in local population densities. There was an increase in archaeological visibility during the Middle Archaic Period for northeastern California. For instance, many of the most elaborate regional archaeological manifestations.

During the Middle Archaic, there was an intensification of plant and faunal resources, and the hunting of large game appears to have continued throughout. However, the presence of rabbit and other small rodents in the faunal assemblages along with the grinding implements suggest that changes were occurring with regards to subsistence practices with a greater diversity of utilized species. Winter sites and seasonal base camps appeared to have been consistently reoccupied, with winter villages possessing semi-subterranean pit houses and interior features such as hearths, storage pits and burials.

4.1.3 Late Archaic (1,300 BP to 600 BP)

For northeastern California, the Late Archaic includes several cultural changes which may have been triggered by population increases, and a response to a warmer, drier climatic trend which peaked sometime around 1500 BP During the Late Archaic period, the atlatl and dart were replaced by the bow and arrow and other smaller and lighter projectile points such as the Eastgate and Rose Spring series. Technological changes occurred to lithic resources in regard to the production of expediently made flake tools from locally available materials rather than the use of quarried raw materials. Plant processing equipment became more abundant and elaborate within the site assemblages across the region during this period. These assemblages suggest a reorganization of the settlement-subsistence adaptation, based on a major intensification in the exploitation of roots and other plant resources. This also suggests that plant foods and small game were exploited at the expense of large game. Overall, the subsistence strategy during the Late Archaic involved a continued increase in both the diversity of resources being utilized as well as the variety of habitats exploited. These changes are thought to reflect a decreased foraging mobility and territoriality.

4.1.4 Terminal Precontact (600 BP to European Contact)

Throughout the broader interface between Great Basin and California-oriented populations in this region, large seasonal or semi-permanent, Late Archaic settlements were abandoned and replaced by smaller sites inhabited by one or a few independent households. This shift to smaller settlements also created significant reduction in the logistical procurement of resources, most of which were now exploited daily from residential encampments. Much of the same pattern is reflected in a lack of specialized implements, with the artifact assemblages being extremely similar between sites and comprised predominantly of expedient implements.

Several Terminal Prehistoric habitation sites were documented along the Tuscarora and Alturas corridors, the most important being a large habitation complex within Crooks Canyon, near Likely. There settlement pattern represented by these residential components was most likely defensive in nature, perhaps a response to the social instability during the very end of the prehistoric period. Prehistoric occupation in the region is thought to be represented by the residues of small, family-level bands of Numic ancestry who exploited resources mostly from residential encampments.

4.2 ETHNOGRAPIC HISTORY

The following ethnographic history information is based on the Cultural Resource Assessment of the Proposed Sierra View Subdivision Sewer Line and Historical Evaluation of the Cramer Ranch Complex, Lassen County, California, prepared by Peak and Associates (Peak and Associates 1996).

Francis A. Riddell did ethnographic work with the Honey Lake Paiute, the Maidu and, to an extent, the Achomawi, making him uniquely qualified to deal with the confused situation in Honey Lake Valley in the proto-historic period. The Maidu had controlled all of Honey Lake Valley, until the Paiute incursion into the area and apparently held off the newcomers from about 1300 to 1700. At this point the Maidu withdrew to the west side of the valley, centering on the Susan River, and the Wadikut band of Paiute took over the shores of Honey Lake. Riddell found that the Maidu claimed to have controlled this territory, but could name no camp sites or other features, while the Paiute could supply names and locations for camps and geographic features all around Honey Lake. The actual date of this change of control is an educated guess.

The way of life of both peoples was quite similar as far as technology and subsistence pattern. Their main villages were located near reliable water supplies and much of the subsistence base was derived from the plentiful plants and animals which depended upon the same water source. Both also ranged widely for other vegetable and animal food sources, ground nuts and seeds into flour, participated in communal hunts, and probably enjoyed fairly peaceful relationships with each other, after a period of adjustment. The adjustment was aided by very different attitudes toward Honey Lake. To the Maidu, who were basically mountain people and controlled several rich valleys on both sides of the Sierra crest, Honey Lake had been merely a far eastern possession of no great importance. To the Paiute the lake represented an opportunity to avoid a life of wandering on the desert and, as such, was vitally important.

The Achomawi and Washo both made their presence felt in the valley during the historic period, but the time depth of their incursions is not known. By the time the early settlers noticed and identified them, both groups were under a great deal of pressure from settlers in their own territories and could have taken to raiding other territories because their best food resources in their home country were already under white control.

The initial contact with whites proceeded much more slowly in Honey Lake Valley than in many areas of California. There was never a real gold rush in this area, although a lot of prospecting was done, and the white population of the valley grew slowly. The Indians managed to retain their traditional lifestyle for some time after contact. As a result, the white settlers lived in constant fear of an "Indian uprising" while the Indians watched their best land slowly but surely fall into the hands of farmers and ranchers. Some small-scale violence did result, but never in the magnitude that the settlers feared.

4.3 CONTEMPORARY NATIVE AMERICAN SETTING

The original 30 acres of the Susanville Indian Rancheria were purchased August 15, 1923, under the Landless and Homeless Act; in which the U.S. Congress provided funds to purchase land for Landless and Homeless California Indians (SIR 2024).

On June 6, 1975, Clifton C. Cramer and Betty G. Cramer performed a Quit Claim conveyance of the old Indian Cemetery consisting of 0.53 acres to the Bureau of Indian Affairs to hold into trust for the Susanville Indian Rancheria. The Bureau of Indian Affairs accepted this conveyance on December 7, 1981. An additional 120 acres was added to the Rancheria on October 14, 1978, under the special legislation of Public Law 95-459 which was sponsored by the

honorable Congressman Bizz Johnson. Another 80 acres was donated to the Rancheria in 1994 that has not been put into Federal Trust status. An additional 72 acres located at the Sierra Army Depot based in Herlong, California, was acquired from the U.S. Department of the Army under the Base Realignment and Closure Act and added to the Rancheria on November 6, 2000.

The Susanville Indian Rancheria Housing Authority purchased 3.21 acres on December 30, 2000, transferred that land to the tribe, and the land was accepted into trust status on January 5, 2004. On March 29, 2002, the tribe purchased an additional 875 acres adjacent to the Upper Rancheria utilizing proceeds from the casino loan from the Marshall Group and this land was accepted into trust status on December 8, 2004. On September 30, 2003, the tribe purchased 160 acres located close to Antelope Lake – The Cradle Valley Ranch. On January 28, 2016, the Susanville Indian Rancheria Corporation signed a Grant Deed transferring 10.45 acres of the Guitierez property that are adjacent to west side of Paul Bunyan Road to the tribe at no cost.

Congressman Doug LaMalfa (R-CA-1) introduced H.R. 2212 on May 1, 2015, seeking to transfer 301 acres of Federal Land that the Bureau of Land Management had identified as excess property to the tribe. On June 22, 2016, President Obama signed Public Law 114-181 that transferred these lands into trust for the benefit of the Susanville Indian Rancheria. On September 12, 2016, after the passage of a ballot measure approving the purchase of the Guitierez property to the east side of Paul Bunyan Road, the Susanville Indian Rancheria purchased five parcels of land totaling 37.17 acres. This additional land brings the total land base of the tribe to 1,401.74 acres in trust status and 287.62 acres in fee status.

The anthropological tribes associated with the Susanville Indian Rancheria are: Maidu, Paiute, Pit River, and Washoe. The Federal Government, however, through the Department of the Interior recognizes *political entities* and not the anthropological entities. The Susanville Indian Rancheria, although it is made up of various tribes, is recognized as a distinct (political) entity from the other tribes who make up the Susanville membership (SIR 2024).

4.4 EUROMERICAN HISTORIC SETTING

4.4.1 Lassen County History

In the 1840's, John C. Fremont and his army followed the trails left behind by fur trappers exploring the area in the 1830's to prepare for the Bear Flag revolt, which led to the creation of California (Lassen County 2024).

With the Gold Rush of 1849 and emigrants following established trail routes through the area, it was not until 1854 that the area began to take shape, as a trading post was established on the west end of Honey Lake Valley. A small gold rush just south of the trading post two years later caused the permanent settlement of Honey Lake Valley and Lassen County.

In 1863, due to a growing dispute over land boundaries and taxes, the Sagebrush War ensued. After a victorious end for the residents in the area, Lassen County was created.

By 1880, many settlements had sprung up in the area, and the railroad industry had begun to develop interests in the area. The Nevada-California-Oregon Railway, which operated from 1880 to 1927, was the longest narrow-gauge line in the nation in this century, traversing the eastern side of the County and assisted in the development of the high desert region of eastern Lassen. The Fernley & Lassen Railroad, built in 1913, tapped into western Lassen's timber resources.

Also shaping the area at that time was the lumber industry, particularly the Red River Lumber Company of Westwood, the world's largest electrical sawmill of that time, and two other large mills which developed in the Susanville area (Lassen County 2024).

4.4.2 Susanville History

Situated at 4,186 feet elevation along the Susan River on the northeastern corner of the Sierra Nevada, the city of Susanville has a unique and colorful history, established in the aftermath of an 1863 skirmish called the Sagebrush War. Before the war, the area was known as Rooptown, named after the Isaac Roop, one of thousands of emigrants who camped at the foot of the Sierra Nevada before making the final push to the coast. Rooptown was a popular stopover thanks to its lush grasses and ample water, something emigrants hadn't seen for hundreds of miles while crossing the Nevada desert (SBTS 2024).

In 1853, Isaac Roop constructed a cabin that became a trading post, and later, a fortification used during the Sagebrush War. The war was rooted in a boundary dispute about Rooptown and whether it was in Plumas County of California or Roop County in the Nevada Territory. The citizens of the area played both sides against each other, refusing to pay taxes when both territory's officials would appear to collect, claiming they were residents of the other territory.

Soon this lack of tax collection came to a head, and after legal wrangling between the two territories could not solve the problem, posses were formed and a gun battle between the two counties ensued, using Roop's cabin as a stronghold against Plumas County, which became known as Fort Defiance. After four hours of shots fired back and forth with only a few non-lethal casualties, both sides realized this dispute wasn't worth dying over. To this day, Roop's cabin stands, bullet holes and all.

As a result, the California/Nevada border was resurveyed from Lake Tahoe to the Oregon border, and the results showed Rooptown in the state of California. To appease the residents who did not want to be annexed into Plumas County, the state legislature created Lassen County in 1864, making the new town of Susanville (named after Susan Roop) the county seat, which it remains to this day.

Susanville had a long stretch of economic health thanks to strong logging, farming and mining economies. But by the 1960s, these industries waned, landing the community in economic hardship. Susanville had the California Correctional Center that opened in 1963, but it wasn't until the construction of the High Desert State Prison, California in 1995 that the population – and the jobs that came with it – started to skyrocket (SBTS 2024).

5 RESULTS

5.1 BACKGROUND RESEARCH

The results of the NEIC records search found that no cultural resources have been previously identified within the APE and that approximately one percent of the APE has been previously surveyed for cultural resources. Review of the 1864 GLO plat map and historic USGS topographic maps starting in 1954, did not reveal any development activity within the APE.

5.2 PEDESTRIAN SURVEY RESULTS

The entirety of the ADI was surveyed on December 7, 2024. Ground visibility was poor (0-15 percent) due to the majority of the ADI being covered in dense, 3-foot tall in most areas, dry grasses. During the pedestrian survey, all visible ground surface in the ADI was carefully examined for cultural material (e.g., flaked stone tools, tool-making debris, stone milling tools, or fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions and features indicative of the former presence of structures or buildings (e.g., postholes, foundations), or historic-era debris (e.g., metal, glass, ceramics). Ground disturbances (e.g., animal burrows, embankments, graveled or dirt roads, etc.) were visually inspected. No archaeological resources were discovered as a result of this survey. A digital camera was used to take photographs of the ADI and a selection of these are provided in Figures 5-1 through 5-4.

5.3 POTENTIAL FOR BURIED ARCHAEOLOGICAL DEPOSITS

There is one geologic unit present in the APE, the Quaternary Lake Deposits and the surficial soils within the APE are the Blickenstaff, Susanville, Truckee, Lakeview, and Springmeyer series (Mulvaney 2024; UCD SoilWeb 2024). Because the Quaternary material formed long before the first human occupation of the area (11,000 to 30,000 years before present), it is unlikely to contain or to have buried archaeological resources. The predominant (90 percent) overlying soil of the APE is the Blickenstaff, which formed in alluvium derived from granite dating to the Middle Holocene (4,000 to 2,000 BP; Rosenthal and Meyer 2004a, 2004b), and so are generally more sensitive for buried cultural remains.

Landscape evolution and historic and modern development can impact the visibility of the archaeological record, but research has shown that archaeological sites tend to occur in specific geo-environmental settings (e.g., near reliable water sources and on stable land surfaces) rather than randomly throughout the landscape. For example, geoarchaeological studies have found that distance to water sources (e.g., stream, lake, spring) and landform slope (generally <18%) are two environmental variables that help accurately predict a location's potential to contain buried archaeological deposits (e.g., Caltrans 2010; Caltrans 2008; Rosenthal and Meyer 2004a, 2004b). The topography of the terrain in the APE is relatively flat. The Susan River runs roughly east/west directly north of the APE. The APE is undeveloped. Therefore, due to the age of the soils present, history of land use, and the negative results of the current survey suggest that the potential for the presence of buried deposits of cultural resources in the APE is moderate.



Source: Ascent Environmental in 2024.

Overview of ADI with dry grasses obscuring ground surface visibility. South view. Taken on December 7, 2024.



Source: Ascent Environmental in 2024.

ADI with various fences and dry tall grass. West view. Taken on December 7, 2024.

Figure 5-1 Northern Portion of the APE



Source: Ascent Environmental in 2024.

Graded path with exposed ground surface. North view. Taken on December 7, 2024.



Source: Ascent Environmental in 2024.

Dense dry grass with obscured ground surface. East view. Taken on December 7, 2024.

Figure 5-2 Southern Portion of the APE



Source: Ascent Environmental in 2024.

Northern edge of the potential offsite utility along highway 36. South view. Taken on December 7, 2024.



Source: Ascent Environmental in 2024.

Overview of offsite utility adjacent to highway 36. North view. Taken on December 7, 2024.

Figure 5-3 Potential Offsite Utility Along Highway 36



Source: Ascent Environmental in 2024.

Graded shoulder directly adjacent to a fenced private property. West view. Taken on December 7, 2024.



Source: Ascent Environmental in 2024.

Graded shoulder with dry grass obscuring ground surface visibility. West view. Taken on December 7, 2024.

Figure 5-4 Potential Offsite Utility Along Skyline Road

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 FINDINGS AND CONCLUSIONS

In accordance with Section 106 of the NHPA (36 CFR part 800, as revised) and CEQA (PRC 15064.5 and PRC 15126.4), the effects of the proposed project within the APE have been assessed. A full accounting of all potential cultural resources located within the APE was achieved through a records search, literature review, Native American outreach, and field survey. The entire ADI was surveyed for cultural resources on December 7, 2024. No cultural resources were identified as part of this survey effort. As such, a finding of no historic properties affected is recommended under Section 106 and a finding of no impact to historical resources is recommended under CEQA. No further investigation is recommended.

6.2 RECOMMENDATIONS

Both the background research, which includes the NEIC record search results, literature review, tribal outreach efforts, and the pedestrian field survey failed to identify the presence of archaeological resources within the ADI. In addition, the analysis of the geoarchaeological data concluded that the APE has a moderate sensitivity for intact buried archaeological resources. Therefore, it is still recommended that the following measures be applied to the project.

- Worker Awareness Training: Prior to the initiation of project construction, all crew members and contractors conducting ground disturbing activities will be trained on the protection of sensitive archaeological, historical, and tribal cultural resources. Workers will be trained to halt work if cultural resources are encountered during ground disturbance activities. Workers will be instructed to not return to work in the location of the find until instructed to do so by management.
- Inadvertent Discoveries: If archaeological materials are inadvertently discovered during ground-disturbing activities, including midden soils, stone tools, chipped stone, baked clay, or concentrations of shell, bone, charcoal, glass, metal, or ceramics, all work shall cease within 100 feet (30.5 meters) of the find and the services of a professional archaeologist shall be retained immediately. At that time, the City of Susanville shall coordinate any necessary investigation of the site with the archaeologist as needed to evaluate the significance of the resource per PRC Section 5024.1 and 21083.2(g) and provide proper management recommendations. If the find is determined to be a historical resource and/or a unique archeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures and/or mitigation shall be made available. Possible management recommendations for significant resources could include resource avoidance or data recovery excavations. If the qualified archaeologist determines the archaeological material to be Native American in nature, the applicant and the City shall contact the appropriate Native American tribe(s) for their input on the preferred treatment of the find. The contractor shall implement any measures deemed necessary by the archeologist and/or tribe for the protection of the cultural resources. Do not resume work in the area of the discovery until directed to do so by the archaeologist.

If human remains should be discovered, the following measure should be implemented.

- Inadvertent Discovery of Human Remains: If human remains are discovered during construction activities, work within 100 feet (30 meters) of the remains shall be stopped immediately, and the project proponent shall notify the Lassen County Coroner, in accordance with Section 5097.98 of the PRC and Section 7050.5 of California's Health and Safety Code. If the remains are determined by the coroner to be Native American, the coroner will notify the Native American Heritage Commission within 24 hours, and they will designate a Most Likely Descendant (MLD). Together the landowner and the MLD shall determine the ultimate treatment and disposition of the remains in accordance with PRC Section 5097.94.

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Appendix A

Record Search Results

California Historical Resources Information System

BUTTE
GLENN
LASSEN
MODOC
PLUMAS
SHASTA
SIERRA
SISKIYOU
SUTTER
TEHAMA
TRINITY

Northeast Information Center
1074 East Avenue, Suite F
Chico, California 95926
Phone (530) 898-6256
neinfocntr@csuchico.edu

November 26, 2024

Roberto Mora
Ascent Environmental, Inc.
455 Capitol Mall, Ste 300
Sacramento, CA 95814

IC File # NE24-554
Data Request - Standard

RE: 20240127.03 - Love's - Susanville EIR
T29N, R12E, Sections 3 & 4 MDBM
USGS Susanville 7.5' (1988), Johnstonville 7.5' (1988),
& Susanville 15' (1954) quadrangle maps
Approximately 13.97 acres & .90 linear miles (Lassen County)

Roberto Mora:

In response to your request, a records search for the project cited above was conducted by examining the official maps and records for cultural resources and reports in Lassen County. Please note, the search includes the requested ½-mile radius surrounding the project area.

RESULTS:

Resources within project area:	None listed
Resources within ½-mile radius:	P-18-001679, P-18-005680
Reports within project area:	NEIC-007704, NEIC-010026
Reports within ½-mile radius:	NEIC-001480, NEIC-007702, NEIC-007705, NEIC-011379, NEIC-012425, NEIC-013122, NEIC-013973

Informal Resource within ½-mile radius: Nobles Trail

As indicated on your data request form, the locations of resources and reports are provided in the following format: ☒ Custom Maps ☐ GIS Data ☐ N/A

Resource Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Report Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Other Reports: *	☐ enclosed	☒ not requested	☐ nothing listed
Resource Record Copies:	☒ enclosed	☐ not requested	☐ nothing listed
Report Copies:	☒ enclosed	☐ not requested	☐ nothing listed
Built Environment Resources Directory:	☐ enclosed	☐ not requested	☒ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):	☐ enclosed	☐ not requested	☒ nothing listed
Caltrans Bridge Survey:	☐ enclosed	☒ not requested	☐ nothing listed
Ethnographic Information:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Literature:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Local Inventories:	☐ enclosed	☒ not requested	☐ nothing listed
GLO and/or Rancho Plat Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Shipwreck Inventory:	☐ enclosed	☒ not requested	☐ nothing listed

Notes: *These are classified as studies that are missing maps or do not have a field work component.

Please refer to the NRCS Soil Survey website for current soil survey information:

https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if it is for public distribution.

The provision of California Historical Resources Information System (CHRIS) Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archaeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation (OHP), or the State Historical Resources Commission.

Not all known cultural resources have been recorded and submitted to the OHP, so this record search should not be considered an exhaustive list of all cultural resources present in your project

area. DPR forms and reports that are used for recording and evaluating sites and individual resources are submitted to the Northeast Information Center by private and public agencies. Please note that the Northeast Information Center is not responsible for misinformation of coordinates presented on the submitted DPR forms. If a discrepancy is found, please contact the lead agency for more information.

Due to processing delays and other factors, it is possible that not all reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for cultural resource management work in the search area. Additionally, Native American tribes have cultural resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

An invoice will follow from Chico State Enterprises for billing purposes. Thank you for your concern in preserving California's cultural heritage, and please feel free to contact us if you have any questions or need any further information.

Sincerely,



Casey Hegel, M.A.
Senior Research Associate
Northeast Information Center
(530) 898-6256

Resource Detail: P-18-001679

Identifying information

Primary No.: P-18-001679

Trinomial: CA-LAS-001679H

Name:

Other IDs:

Type	*Name*
Other	TPP-186, TAS-H12H
Other	Tuscarora Testing Program
Other	Fernley and Lassen Railway
Other	Quincy Railroad
Other	Sierra Pacific Railroad

Cross-refs: See also 18-006168

Attributes

Resource type: Site

Age: Historic

Information base: Other

Attribute codes: AH02 (Foundations/structure pads); AH04 (Privies/dumps/trash scatters) - cans, glass, bottles & jars, ceramics; AH07 (Roads/trails/railroad grades) - railroad

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	*Recorder(s)*	*Affiliation*	*Notes*
A	6/22/1994	Ron Reno, B. Mackey, L. Hause	Archaeological Research Services, Inc.	
-	10/26/1993	E. Obermayr, D. Furlong, D. Weatherly, R. Ealy, J. Nelson, B. Norton	INFOTEC Research, Inc.	
B	7/1/1994	Ron Reno	Archaeological Research Services, Inc.	
C	10/1/2001	George Petershagen	California Department of Transportation	
D	9/10/2013	Cassandra Hensher	Caltrans	
E	4/2/1999	R. Scott Baxter, Kate Lanier	KEA Environmental, Inc.	
F	9/28/2017	Andrea Maniery	PAR Environmental Services, Inc.	

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
NEIC-0113	2010	Historic Property Survey Report Archaeological Survey Report for the Johnstonville Pavement Focus Rehabilitation Project, Lassen County, California 02-LAS-395, P.M 56.7/76.6 EA: 02-3C0700	Caltrans
NEIC-0124	2013	Cultural Resources Screening Memo for Skyline South Rail Trail Project, Lassen County, California	California Department of Transportation

Location information

County: Lassen

USGS quad(s): CALNEVA LAKE, JOHNSTONVILLE, LITCHFIELD, SHAFFER MTN, SPENCER CREEK, SUSANVILLE, WENDEL, WENDEL HOT SPRINGS

Address:

PLSS: T29N R15E Sec. 26 MDBM

T29N R15E Sec. 23 MDBM
T29N R15E Sec. 22 MDBM
T29N R15E Sec. 21 MDBM
T29N R15E Sec. 20 MDBM
T29N R15E Sec. 18 MDBM
T29N R15E Sec. 17 MDBM
T29N R14E Sec. 14 MDBM
T29N R14E Sec. 13 MDBM
T29N R14E Sec. 11 MDBM
T29N R14E Sec. 10 MDBM
T29N R14E Sec. 9 MDBM
T29N R14E Sec. 8 MDBM
T29N R14E Sec. 7 MDBM
T29N R13E Sec. 12 MDBM
T29N R13E Sec. 1 MDBM
T29N R13E Sec. 2 MDBM
T29N R13E Sec. 3 MDBM
T29N R13E Sec. 4 MDBM
T29N R13E Sec. 5 MDBM
T29N R13E Sec. 6 MDBM
T29N R12E Sec. 1 MDBM
T29N R12E Sec. 2 MDBM
T29N R12E Sec. 4 MDBM
T29N R12E Sec. 5 MDBM
T30N R12E Sec. 32 MDBM

UTMs: Zone 10 701192mE 4474776mN NAD27

Management status

Database record metadata

	Date	*User*	
Entered:	8/9/2006	jay	
Last modified:	7/31/2018	kmpiercy	
IC actions:	*Date*	*User*	*Action taken*
	10/31/2006	jay	Appended records from old Encoding database
	12/12/2013	ashlee	added information
	3/11/2015	jmsharp	added PLSS and UTMs from record
	4/20/2016	aslattery	added information from updates and original record
	2/13/2018	kmpiercy	Update E added
	7/31/2018	kmpiercy	Update F added

Record status: Database Complete

Resource Detail: P-18-005680

Identifying information

Primary No.: P-18-005680
Trinomial:
Name:
Other IDs:
Cross-refs: See also 18-000168
See also 18-005679

Attributes

Resource type: Object
Age: Prehistoric
Information base: Survey
Attribute codes: AP04 (Bedrock milling feature)
Disclosure: Not for publication
Collections: Unknown
Accession no(s):
Facility:

General notes

F. A. Riddel initially recorded three unrelated sites (two Burials and an a basalt mortar) as a single resource. The resource has been split into three sites, see the cross references for more information.

Recording events

	Date	*Recorder(s)*	*Affiliation*	*Notes*
-	4/12/1956	F.A. Riddell		

Associated reports

Location information

County: Lassen
USGS quad(s): SUSANVILLE
Address:
PLSS: T29N R12E NW¼ of NW¼ of Sec. 4 MDBM
UTMs:

Management status

Database record metadata

	Date	*User*	
Entered:	1/9/2019	kdeutsch	
Last modified:	1/9/2019	kdeutsch	
IC actions:	*Date*	*User*	*Action taken*
	1/9/2019	kdeutsch	Intial Entry

Record status:

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-18-001679	CA-LAS-001679H	Other - TPP-186, TAS-H12H; Other - Tuscarora Testing Program; Other - Fernley and Lassen Railway; Other - Quincy Railroad; Other - Sierra Pacific Railroad	Site	Historic	AH02; AH04; AH07	1993 (E. Obermayr, D. Furlong, D. Weatherly, R. Ealy, J. Nelson, B. Norton, INFOTEC Research, Inc.); 1994 (Ron Reno, B. Mackey, L. Hause, Archaeological Research Services, Inc.); 1994 (Ron Reno, Archaeological Research Services, Inc.); 1999 (R. Scott Baxter, Kate Lanier, KEA Environmental, Inc.); 2001 (George Petershagen, California Department of Transportation); 2013 (Cassandra Hensher, Caltrans); 2017 (Andrea Maniery, PAR Environmental Services, Inc.)	NEIC-011340, NEIC-012425
P-18-005680			Object	Prehistoric	AP04	1956 (F.A. Riddell)	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
NEIC-007704	Voided - L-L-61	1989	Peter M. Jensen	Archaeological Inventory Survey in Conjunction With the Proposed Skyline Road Construction Project, Susanville, Lassen County, California	Jensen & Associates	18-000039, 18-000464, 18-000465
NEIC-010026	Voided - L-L-131	1983	Robert A. Middleton	Archaeological Reconnaissance of the Proposed Freeway Access Road Project, in Susanville, Lassen County, California		
NEIC-010026		1983	James Johnston	An Archaeological Reconnaissance of the City of Susanville Highway 36 Access Project, Lassen County, California	Mountain Anthropological Research	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
NEIC-001480		1996	Lisa S. Peak	Cultural Resource Assessment of the Proposed Sierra View Subdivision Sewer Line and Historical Evaluation of the Cramer Ranch Complex, Lassen County, California	Peak & Associates	18-000014, 18-000055
NEIC-007702	Voided - L-L_29	1986	Michael F. Rondeau	Negative Archaeological Report for the Construction of Acceleration and Deceleration Lanes on State Route 36, Lassen County, California	Caltrans	
NEIC-007705	Voided - L-L-76	1991	David Rhode	Professional Archaeological Services and Techniques Cultural Resources Reconnaissance Report		
NEIC-011379	IC Record Search Nbr - I10-2	2011	Sean Jensen	Archaeological Survey, Kirack-Manning Industrial Development Project, c. 21-acres, Lassen County, California	Genesis Society	
NEIC-012425	Other - RPSTPLE 5907(045)	2013	Cassandra Hensher	Cultural Resources Screening Memo for Skyline South Rail Trail Project, Lassen County, California	California Department of Transportation	18-001679
NEIC-013122	NRCS - 14FY18-0013	2014	Eric Pietz	Project #_14FY18-0013, Field Office Report on Cultural Resources Ground Survey Findings	USDA-NRCS	
NEIC-013973	Caltrans - PPNO 3492; Caltrans - SR 36 PM 26.2 to PM 26.5; IC Record Search Nbr - D17-129	2017	Christina Alonso	An Archaeological Survey Report and Historic Properties Report for the Susanville Southeast Gateway, Lassen County, California	WSA, Inc.	
NEIC-013973		2017	Christina Alonso	A Historic Property Survey Report for the Susanville Southeast Gateway Project, Lassen County, California	WSA, Inc.	

Appendix B

Tribal Correspondence

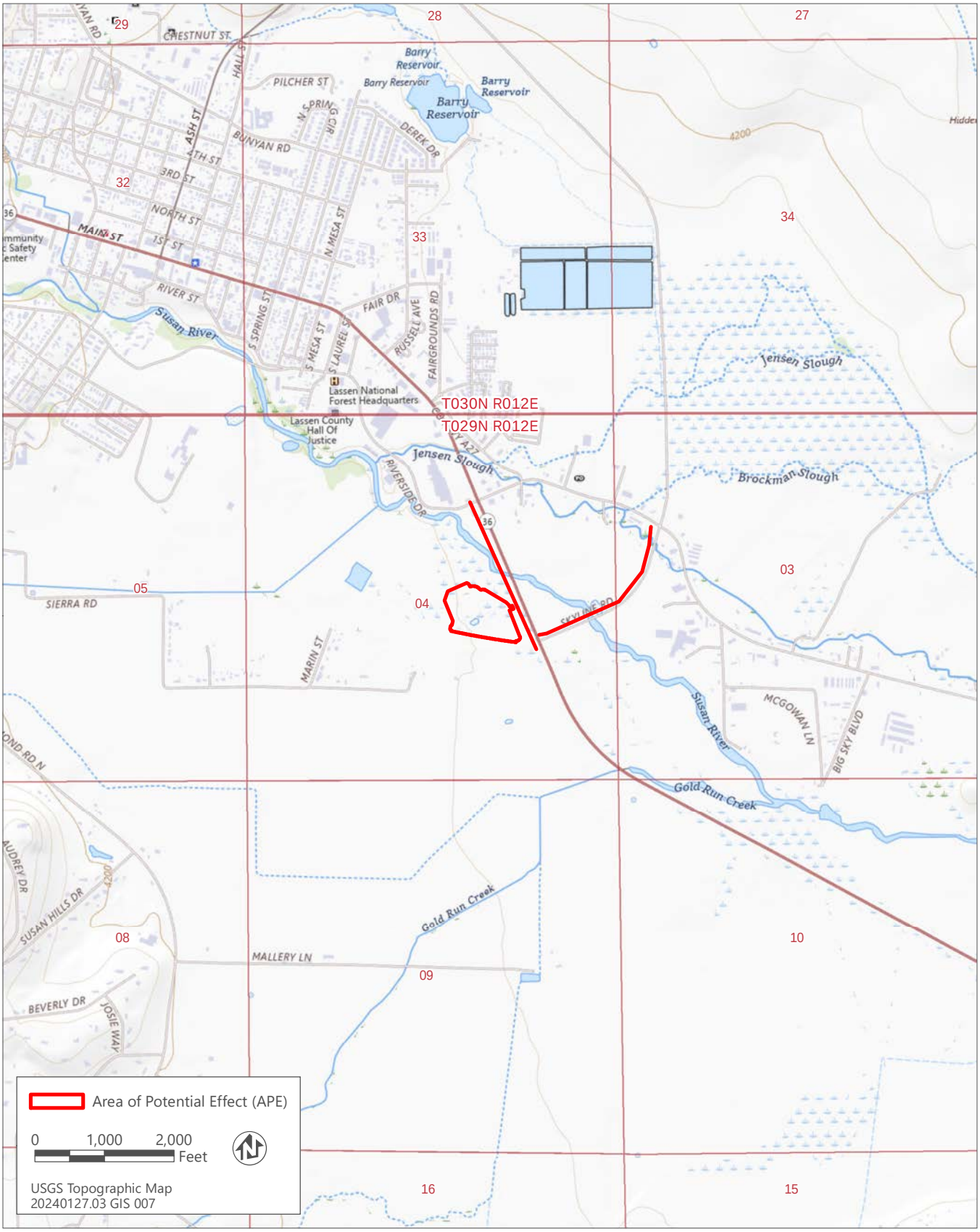
Native American Heritage Commission
Native American Contact List
Lassen County
11/6/2024

County	Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
Lassen	Berry Creek Rancheria of Maidu Indians	F	Francis Steele, Chairperson	5 Tyme Way Oroville, CA, 95966	(530) 534-3859	(530) 534-1151	fsteele@berrycreekrancheria.com	Maidu	Butte, Lassen, Plumas, Sierra, Tehama	
	Estom Yumeka Maidu Tribe of the Enterprise Rancheria	F	Glenda Nelson, Chairperson	2133 Monte Vista Avenue Oroville, CA, 95966	(530) 532-9214	(530) 532-1768	info@enterpriserancheria.org	Maidu	Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama	9/10/2024
	Estom Yumeka Maidu Tribe of the Enterprise Rancheria	F	Nelson Smith, Tribal Historic Preservation Officer	2133 Monte Vista Avenue Oroville, CA, 95966	(530) 990-0063		nelsons@enterpriserancheria.org	Maidu	Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Plumas, Shasta, Sierra, Siskiyou, Sonoma, Tehama	9/10/2024
	Greenville Rancheria of Maidu Indians	F	Kyle Self, Chairperson	P.O. Box 279 Greenville, CA, 95947	(530) 284-7990	(530) 284-6612	kself@greenvillerancheria.com	Maidu	Butte, Lassen, Plumas, Shasta, Sierra, Tehama	
	Honey Lake Maidu	N	Paul Garcia, Chairperson	7029 Polvadero Drive San Jose, CA, 95119	(408) 499-1565		drinkwiz@sbcglobal.net	Maidu	Butte, Lassen, Plumas, Shasta, Sierra, Tehama	6/12/2023
	Honey Lake Maidu	N	Ron Morales, Chairperson	1101 Arnold Street Susanville, CA, 96130	(530) 257-3275			Maidu	Butte, Lassen, Plumas, Shasta, Sierra, Tehama	
	Mooretown Rancheria of Maidu Indians	F	Guy Taylor,	#1 Alverda Drive Oroville, CA, 95966	(530) 533-3625			KonKow Maidu	Butte, Glenn, Lassen, Plumas, Shasta, Sierra, Sutter, Tehama, Yuba	1/15/2019
	Mooretown Rancheria of Maidu Indians	F	Benjamin Clark, Chairperson	#1 Alverda Drive Oroville, CA, 95966	(530) 533-3625	(530) 533-3680	frontdesk@mooretown.org	KonKow Maidu	Butte, Glenn, Lassen, Plumas, Shasta, Sierra, Sutter, Tehama, Yuba	
	Pakan'yani Maidu of Strawberry Valley Rancheria	N	Tina Goodwin, Chairperson	P.O. Box 984 Marysville, CA, 95901	(617) 417-2166		tinagoodwin@washoetanf.org	Maidu Miwok	Alpine, Amador, Butte, Calaveras, Contra Costa, El Dorado, Fresno, Lassen, Madera, Mariposa, Merced, Mono, Plumas,	
	Susanville Indian Rancheria	F	Arian Hart, Tribal Chairman	745 Joaquin Street Susanville, CA, 96130	(530) 257-6264		ahart@sir-nsn.gov	Maidu Paiute Pit River Washoe	Alpine, Amador, Butte, Calaveras, El Dorado, Lassen, Mariposa, Modoc, Mono, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Tehama, Tuolumne, Yuba	9/4/2024

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 20240127.03 Love's – Susanville Project, Lassen County.

Record: PROJ-2024-005763
Report Type: List of Tribes
Counties: Lassen
NAHC Group: All



Source: Adapted by Ascent in 2024. 10/28/2024

Cultural Map Topo

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok, Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,

November 6, 2024

Roberto Mora
Ascent Environmental

Via Email to: roberto.mora@ascent.inc

Re: 20240127.03 Love's – Susanville Project, Lassen County

Dear Mr. Mora:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were positive. Please contact the tribes on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Pricilla.Torres-Fuentes@nahc.ca.gov.

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

Attachment

From:	Nelson Smith
To:	Roberto Mora
Subject:	RE: Susanville Love"s Travel Stop - Project Information letter
Date:	Tuesday, January 7, 2025 10:22:25 AM
Attachments:	image007.png image008.png image009.png image010.png

Good Morning Roberto,

Thank you for submitting the Susanville Love's Travel Stop project for our review. After a thorough review process this project lands outside Enterprise Rancherias aboriginal lands; therefore, we have no comments and differ to the local tribe/s.

Thanks,

Nelson Smith
Department of Natural Resources Co-Director\THPO
2133 Monte Vista Ave. Oroville, Ca, 95966
Office 530-532-9214
Cell Phone 530-990-0063

From: Roberto Mora <roberto.mora@ascent.inc>
Sent: Thursday, December 19, 2024 10:18 AM
To: info info <info@enterpriserancheria.org>; Nelson Smith <nelsons@enterpriserancheria.org>
Subject: Susanville Love's Travel Stop - Project Information letter

Greetings!

I am contacting you today as part of the cultural resources background investigation for the Susanville Love's Travel Stop Project located in Susanville, Lassen County. Ascent has been retained to conduct the cultural resources assessment and technical study and this contact is concerning that effort. This contact is for informational purposes to inform the cultural resources survey and assessment report, and to comply with 36 CFR 800.2 for Section 106 nexus (Army Corps of Engineers 404 permit). *Please note that this outreach does not constitute consultation as required under Section 106. The Army Corps will initiate consultation with your Tribe during the permitting process.*

Project Description

Lane Engineers, Inc. (applicant) is proposing to construct and operate a full-service travel stop located on vacant land to the southeast of the City of Susanville. Off-site utilities are currently being proposed along the west side of highway 36 and west side of Skyline Road. The APE is approximately 14 acres located on vacant land southeast of the City of Susanville. **The APE is in an unincorporated area of Lassen County that will be annexed into the City of Susanville.** The Area of Potential Effect (APE) is located on the Susanville and Johnstonville 7.5' USGS Topographic Quadrangle at T 29N, R 12E, Sections 3 and 4. A map of the APE location is attached to this email.

Current Investigation

A record search has been conducted at the Central Coast Information Center on November 26, 2024. No indigenous archaeological resources have been previously identified within the APE. A pedestrian survey was conducted on December 7, 2024. No cultural resources were identified within the APE as a result of the survey. The SLF search through the Native American Heritage Commission (NAHC) returned positive.

Information Request

The NAHC has identified you as someone who may have information concerning cultural resources of tribal concern which may be present in the APE. If you have any knowledge of such resources within the APE, and are willing to share their nature and location, please let me know so I can include that information in the cultural report. information provided regarding specific sites or Native American cultural resources will remain confidential. My contact information is provided below.

Thank you much for your time and attention,

Roberto Mora, RPA
Archaeologist
Pronouns: he/him/his
D 916.732.3328 | **M** 916.330.0624
roberto.mora@ascent.inc

Careers @ Ascent

Ascent
455 Capitol Mall, Suite 300
Sacramento, CA 95814
O 916.444.7301

Note: *My email address has changed, please update your address book.*

Roberto Mora
D 916.732.3328 | **M** 916.330.0624

From: Roberto Mora
To: "tinagoodwin@washoetanf.org"
Subject: RE: Susanville Love"s Travel Stop - Project Information letter
Date: Wednesday, January 8, 2025 1:20:00 PM
Attachments: 20240127_03_GIS_007_CulturalMap_Topo.pdf
image001.png
image002.png
image003.png
image004.png

Good afternoon,

This email is a follow-up regarding the Susanville Love's Travel Stop Project located in Susanville, Lassen County sent to you on December 19, 2024. A map of the APE is attached again here for your reference.

This contact to comply with 36 CFR 800.2 for Section 106 nexus (Army Corps of Engineers 404 permit) for *coordination* purposes, and to inform the cultural resources survey report.

The Native American Heritage Commission has identified you as someone who may have information concerning cultural resources of tribal concern which may be present in the APE. If you or the Tribe have any knowledge of such resources within the APE, and are willing to share their nature and location, please let me know. My contact information is provided below.

Thank you for your time and attention.

Roberto Mora, RPA
Archaeologist
Pronouns: he/him/his
D 916.732.3328 | M 916.330.0624
roberto.mora@ascent.inc

From: Roberto Mora
Sent: Thursday, December 19, 2024 10:24 AM
To: tinagoodwin@washoetanf.org
Subject: Susanville Love's Travel Stop - Project Information letter

Greetings!

I am contacting you today as part of the cultural resources background investigation for the Susanville Love's Travel Stop Project located in Susanville, Lassen County. Ascent has been retained to conduct the cultural resources assessment and technical study and this contact is concerning that effort. This contact is for informational purposes to inform the cultural resources survey and assessment report, and to comply with 36 CFR 800.2 for Section 106 nexus (Army Corps of Engineers 404 permit). *Please note that this outreach does not constitute consultation as required under Section 106. The Army Corps will initiate consultation with your Tribe during the permitting process*.

Project Description

Lane Engineers, Inc. (applicant) is proposing to construct and operate a full-service travel stop located on vacant land to the southeast of the City of Susanville. Off-site utilities are currently being proposed along the west side of highway 36 and west side of Skyline Road. The APE is approximately 14 acres located on vacant land southeast of the City of Susanville. **The APE is in an unincorporated area of Lassen County that will be annexed into the City of Susanville.** The Area of Potential Effect (APE) is located on the Susanville and Johnstonville 7.5' USGS Topographic Quadrangle at T 29N, R 12E, Sections 3 and 4. A map of the APE location is attached to this email.

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Thank you much for your time and attention,

Roberto Mora, RPA
Archaeologist
Pronouns: he/him/his
D 916.732.3328 | **M** 916.330.0624
roberto.mora@ascent.inc

ASCENT Careers @ Ascent

Ascent
455 Capitol Mall, Suite 300
Sacramento, CA 95814
O 916.444.7301

Note: *My email address has changed, please update your address book.*

From:	Roberto Mora
To:	"ahart@sir-nsn.gov"
Subject:	RE: Susanville Love"s Travel Stop - Project Information letter
Date:	Wednesday, January 8, 2025 1:21:00 PM
Attachments:	20240127_03_GIS_007_CulturalMap_Topo.pdf image001.png image002.png image003.png image004.png

---

Good afternoon,

This email is a follow-up regarding the Susanville Love's Travel Stop Project located in Susanville, Lassen County sent to you on December 19, 2024. A map of the APE is attached again here for your reference.

This contact to comply with 36 CFR 800.2 for Section 106 nexus (Army Corps of Engineers 404 permit) for *coordination* purposes, and to inform the cultural resources survey report.

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Roberto Mora, RPA
Archaeologist
Pronouns: he/him/his
D 916.732.3328 | **M** 916.330.0624
roberto.mora@ascent.inc

From: Roberto Mora
Sent: Thursday, December 19, 2024 10:25 AM
To: ahart@sir-nsn.gov
Subject: Susanville Love's Travel Stop - Project Information letter

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Roberto Mora, RPA
Archaeologist
Pronouns: he/him/his
D 916.732.3328 | **M** 916.330.0624
roberto.mora@ascent.inc

Careers @ Ascent

Ascent
455 Capitol Mall, Suite 300
Sacramento, CA 95814
O 916.444.7301

Note: *My email address has changed, please update your address book.*

From: Roberto Mora
To: frontdesk@mooretown.org
Subject: RE: Susanville Love"s Travel Stop - Project Information letter
Date: Wednesday, January 8, 2025 1:20:00 PM
Attachments: image001.png
image002.png
image003.png
image004.png
20240127_03_GIS_007_CulturalMap_Topo.pdf

Good afternoon,

This email is a follow-up regarding the Susanville Love's Travel Stop Project located in Susanville, Lassen County sent to you on December 19, 2024. A map of the APE is attached again here for your reference.

This contact to comply with 36 CFR 800.2 for Section 106 nexus (Army Corps of Engineers 404 permit) for *coordination* purposes, and to inform the cultural resources survey report.

The Native American Heritage Commission has identified you as someone who may have information concerning cultural resources of tribal concern which may be present in the APE. If you or the Tribe have any knowledge of such resources within the APE, and are willing to share their nature and location, please let me know. My contact information is provided below.

Thank you for your time and attention.

Roberto Mora, RPA
Archaeologist
Pronouns: he/him/his
D 916.732.3328 | M 916.330.0624
roberto.mora@ascent.inc

From: Roberto Mora
Sent: Thursday, December 19, 2024 10:23 AM
To: frontdesk@mooretown.org
Subject: Susanville Love's Travel Stop - Project Information letter

Greetings!

I am contacting you today as part of the cultural resources background investigation for the Susanville Love's Travel Stop Project located in Susanville, Lassen County. Ascent has been retained to conduct the cultural resources assessment and technical study and this contact is concerning that effort. This contact is for informational purposes to inform the cultural resources survey and assessment report, and to comply with 36 CFR 800.2 for Section 106 nexus (Army Corps of Engineers 404 permit). *Please note that this outreach does not constitute consultation as required under Section 106. The Army Corps will initiate consultation with your Tribe during the permitting process*.

Project Description

Lane Engineers, Inc. (applicant) is proposing to construct and operate a full-service travel stop located on vacant land to the southeast of the City of Susanville. Off-site utilities are currently being proposed along the west side of highway 36 and west side of Skyline Road. The APE is approximately 14 acres located on vacant land southeast of the City of Susanville. **The APE is in an unincorporated area of Lassen County that will be annexed into the City of Susanville.** The Area of Potential Effect (APE) is located on the Susanville and Johnstonville 7.5' USGS Topographic Quadrangle at T 29N, R 12E, Sections 3 and 4. A map of the APE location is attached to this email.

Current Investigation

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Information Request

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roberto.mora@ascent.inc

ASCENT Careers @ Ascent

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O 916.444.7301

Note: *My email address has changed, please update your address book.*

From:	Roberto Mora
To:	drinkwiz@sbcglobal.net
Subject:	RE: Susanville Love"s Travel Stop - Project Information letter
Date:	Wednesday, January 8, 2025 1:19:00 PM
Attachments:	20240127_03_GIS_007_CulturalMap_Topo.pdf image001.png image002.png image003.png image004.png

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Roberto Mora, RPA
Archaeologist
Pronouns: he/him/his
D 916.732.3328 | M 916.330.0624
roberto.mora@ascent.inc

From: Roberto Mora
Sent: Thursday, December 19, 2024 10:22 AM
To: drinkwiz@sbcglobal.net
Subject: Susanville Love's Travel Stop - Project Information letter

Greetings!

I am contacting you today as part of the cultural resources background investigation for the Susanville Love's Travel Stop Project located in Susanville, Lassen County. Ascent has been retained to conduct the cultural resources assessment and technical study and this contact is concerning that effort. This contact is for informational purposes to inform the cultural resources survey and assessment report, and to comply with 36 CFR 800.2 for Section 106 nexus (Army Corps of Engineers 404 permit). *Please note that this outreach does not constitute consultation as required under Section 106. The Army Corps will initiate consultation with your Tribe during the permitting process*.

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D 916.732.3328 | **M** 916.330.0624
roberto.mora@ascent.inc

ASCENT Careers @ Ascent

Ascent
455 Capitol Mall, Suite 300
Sacramento, CA 95814
O 916.444.7301

Note: *My email address has changed, please update your address book.*

From: Roberto Mora
To: kself@greenvillerancheria.com
Subject: RE: Susanville Love"s Travel Stop - Project Information letter
Date: Wednesday, January 8, 2025 1:19:00 PM
Attachments: 20240127_03_GIS_007_CulturalMap_Topo.pdf
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D 916.732.3328 | M 916.330.0624
roberto.mora@ascent.inc

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To: kself@greenvillerancheria.com
Subject: Susanville Love's Travel Stop - Project Information letter

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D 916.732.3328 | **M** 916.330.0624
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Careers @ Ascent

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Sacramento, CA 95814
O 916.444.7301

Note: *My email address has changed, please update your address book.*

From: Roberto Mora
To: fsteele@berrycreekrancheria.com
Subject: RE: Susanville Love"s Travel Stop - Project Information letter
Date: Wednesday, January 8, 2025 1:18:00 PM
Attachments: image001.png
image002.png
image003.png
image004.png
20240127_03_GIS_007_CulturalMap_Topo.pdf

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D 916.732.3328 | M 916.330.0624
roberto.mora@ascent.inc

From: Roberto Mora
Sent: Thursday, December 19, 2024 10:15 AM
To: fsteele@berrycreekrancheria.com
Subject: Susanville Love's Travel Stop - Project Information letter

Greetings!

I am contacting you today as part of the cultural resources background investigation for the Susanville Love's Travel Stop Project located in Susanville, Lassen County. Ascent has been retained to conduct the cultural resources assessment and technical study and this contact is concerning that effort. This contact is for informational purposes to inform the cultural resources survey and assessment report, and to comply with 36 CFR 800.2 for Section 106 nexus (Army Corps of Engineers 404 permit). *Please note that this outreach does not constitute consultation as required under Section 106. The Army Corps will initiate consultation with your Tribe during the permitting process*.

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Appendix G

Paleontological Resource Assessment Memorandum

Susanville Travel Stop Project, Susanville, California
Paleontological Resource Assessment Memorandum

May 12, 2025

Prepared for:
Rid Hollands
Senior Environmental Planner
Ascent, Inc.

Prepared by:
Russell Shapiro, Ph.D.
Principal and Qualified Paleontologist
Sub-Terra Heritage Resource Investigations
3153 Chico Avenue, Chico, California

This report presents the results of the literature review, museum and records search completed for Ascent, Inc. (Ascent) for the Proposed Susanville Travel Stop Project EIR, Susanville, California (Project). The Project is located on an approximately 14.15 acre parcel southeast of Susanville, west of State Route 36. The site is in an unincorporated territory of Lassen County but is proposed for annexation into the City of Susanville. The City of Susanville serves as the lead agency for environmental review.

The current study was completed in accordance with the California Environmental Quality Act (CEQA) as required by the City of Susanville. This report was authored by Sub-Terra Heritage Resource Investigations at the request of the Ascent, Inc., to assess the potential for project activity to impact sensitive paleontological resources.

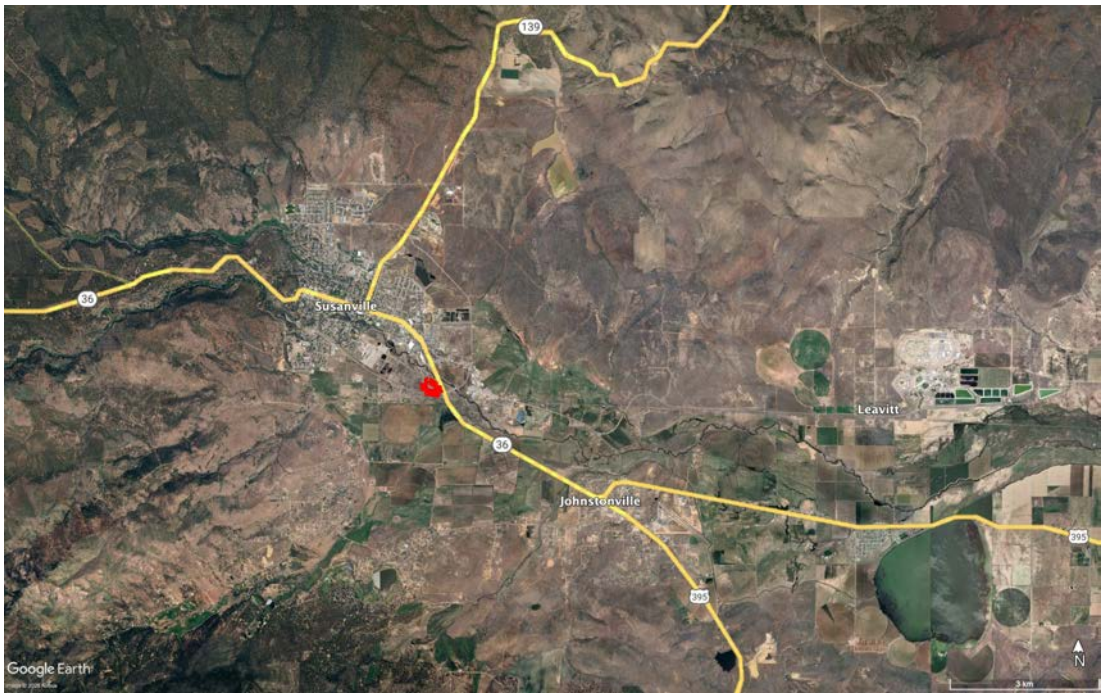


Figure 1. Regional vicinity map for the Proposed Susanville Travel Stop Project.
Project location near Susanville, showing relation to major roads. Imagery from Google Earth Pro.



Figure 2. Detailed Project location map in relation to local roads.
Project boundary estimated from engineering reports. Background image from Google Earth Pro.

DEFINITION AND SIGNIFICANCE OF PALEONTOLOGICAL RESOURCES

Paleontology is a multidisciplinary science that combines elements of geology, biology, chemistry, and physics in an effort to understand the history of life on earth. Fossils are the remains, imprints, or traces of once-living organisms preserved in rocks and sediments. These include mineralized, partially mineralized, or un-mineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains. Paleontological resources include not only fossils themselves, but also the associated rocks or organic matter and the physical characteristics of the fossils' associated sedimentary matrix.

The fossil record is the only evidence that life on earth has existed for more than 3.6 billion years. Fossils are considered non-renewable resources because the organisms they represent no longer exist (Scott and Springer, 2003). Thus, once destroyed, a fossil can never be replaced (Murphey and Daitch, 2007). Fossils are important scientific and educational resources and can be used to:

- study phylogenetic relationships amongst extinct organisms, as well as their relationships to modern groups;
- elucidate the taphonomic, behavioral, temporal, and diagenetic pathways responsible for fossil preservation, including the biases inherent in the fossil record;
- reconstruct ancient environments, climate change, and paleoecological relationships;
- provide a measure of relative geologic dating which forms the basis for biochronology and biostratigraphy, and which is an independent and corroborating line of evidence for isotopic dating;
- study the geographic distribution of organisms and tectonic movements of land masses and ocean basins through time;
- study patterns and processes of evolution, extinction, and speciation; and
- identify past and potential future human-caused effects to global environments and climates (Murphey and Daitch, 2007).

PALEONTOLOGICAL SENSITIVITY ASSESSMENT

As defined by the Society of Vertebrate Paleontology (SVP, 2010, p. 11), "significant paleontological resources are fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years)."

Significant fossiliferous deposits are defined by the SVP (2010, p. 11) as "consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i. e., older than about 5,000 radiocarbon years)."

Based on the significance definitions of the SVP (2010), all identifiable vertebrate fossils are considered to have significant scientific value. This position is adhered to because vertebrate fossils are relatively uncommon, and only rarely will a fossil locality yield a statistically significant number of specimens of the same genus. Therefore, every vertebrate fossil found has the potential to

provide significant new information on the taxon it represents, its paleoenvironment, and/or its distribution. Furthermore, all geologic units in which vertebrate fossils have previously been found are considered to have high sensitivity. Identifiable plant and invertebrate fossils are considered significant if found in association with vertebrate fossils or if defined as significant by project paleontologists, specialists, or local government agencies.

A geologic unit known to contain significant fossils is considered to be "sensitive" to adverse impacts if there is a high probability that earth-moving or ground-disturbing activities in that rock unit will either disturb or destroy fossil remains directly or indirectly. This definition of sensitivity differs fundamentally from the definition for archaeological resources because the boundaries of archaeological sites define the areal extent of the resource. However, paleontological sites, encompass the containing sedimentary rock unit or formation is fossiliferous. The limits of the entire rock formation, both areal and stratigraphic, therefore define the scope of the paleontological potential in each case (SVP, 2010).

Fossils are contained within surficial sediments or bedrock, and paleontologists cannot know either the quality or quantity of fossils prior to natural erosion or human-caused exposure. As a result, even in the absence of surface fossils it is necessary to assess the sensitivity of rock units based on their known potential to produce significant fossils elsewhere within the same geologic unit (both within and outside the study area), a similar geologic unit, or based on whether the unit in question was deposited in a type of environment that is known to be favorable for fossil preservation.

REGULATORY FRAMEWORK

STATE OF CALIFORNIA

California Environmental Quality Act

The California Environmental Quality Act (CEQA) is the principal statute governing environmental review of projects occurring in the state and is codified at California Public Resources Code (PRC) Section 21000 *et seq*. CEQA requires lead agencies to determine whether a proposed project would have a significant effect on the environment, including significant effects on paleontological resources. Guidelines for the Implementation of CEQA, as amended December 28, 2018 (Title 14, Chapter 3, California Code of Regulations 15000 et seq.), define procedures, types of activities, persons, and public agencies required to comply with CEQA. Section VII(f) of the Environmental Checklist (State CEQA Guidelines: Appendix G) asks whether a project would directly or indirectly destroy a unique paleontological resource and result in impacts to the environment.

Other state requirements for paleontological resource management are included in the Public Resources Code (Chapter 1.7), Section 5097.5 and 30244. These statutes prohibit the removal of any paleontological site or feature on public lands without permission of the jurisdictional agency, define the removal of paleontological sites or features as a misdemeanor, and require reasonable mitigation of adverse impacts to paleontological resources from developments on public (state) lands.

California Penal Code Section 622.5

California Penal Code Section 622.5 provides the following: "Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archeological or historical interest or value, whether situated on private lands or within any public park or place, is guilty of a misdemeanor."

California PRC Section 5097.5

California Public Resources Code (PRC) Section 5097.5 provides protection for paleontological resources on public lands, where Section 5097.5(a) states, in part, that:

> "No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, paleontological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other paleontological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands."

CITY OF SUSANVILLE PLANNING DIVISION

The Planning Division of the City of Susanville administers CEQA oversight and is currently updating the 1990-2010 General Plan. The new changes are anticipated to be adopted in Fall, 2025. The Land Use Element update was adopted in March, 2024. However, the updated language does not reference paleontological resources.

METHODOLOGY

Geologic units (bedrock formations) are assigned a sensitivity ranking based on the results of prior and present paleontological work. The ranking takes in the known taxonomic diversity and abundance of previously recorded, scientifically significant fossil occurrences and the potential for future discoveries, as determined by a review of the relevant scientific literature.

The project area was the subject of thorough background research and analysis. The research included geologic map and literature reviews. In addition, the records of the University of California Museum of Paleontology (UCMP) were reviewed as per a memo previously received by Ascent, Inc. The purpose of the museum records search was to: 1) determine whether any previously recorded fossil localities occur in the project area; 2) assess the potential for disturbance of these localities during construction; and 3) evaluate the paleontological sensitivity in the project area.

The results of these methods are presented below in a manner to best allow the evaluation of paleontological resources within the project area.

DISTRIBUTION OF DATA

Copies of this report will be submitted to Ascent, Inc., and physical files pertaining to the project will be retained by Sub-Terra Heritage Resource Investigations.

GEOLOGICAL SETTING

Susanville lies in the Honey Lake Valley, a significant basin near the northwestern terminus of the Basin and Range Province. The bounding mountain ranges are dominated by Miocene to Pleistocene intermediate (andesitic) to mafic (basaltic) lava flows that covered older Paleozoic and Mesozoic rocks that were intruded by Mesozoic granitoids (Clynne et al., 2017; Grose, 2000). The valley floor itself records expansion and then retreat of Lake Lahontan, a major Pleistocene pluvial lake that was located over northeastern California and northwestern Nevada. Belts of facies, from

the shoreline to lake centers, encircle the ancient lake. Honey Lake, southeast of the Project, is a remnant of this once vast lake. During the Holocene, as Lake Lahontan dried up, valleys were carved across the vast plain and have been infilling with recent alluvium.

SITE-SPECIFIC GEOLOGY AND PALEONTOLOGY

The Project is found fully on the valley floor north of Honey Lake. While outcrops of Miocene, Pliocene, and Pleistocene volcanic flows are found near the area, it is unlikely that these units are to be found shallowly below the valley floor. Based on mapping by Grose and Porro (1993), the Project footprint encompasses the contact between Pleistocene lake deposits (Ql) and younger alluvium (Q). The lake shoreline is seen northwest of the Project in Susanville as a mappable region of coarser gravels and sands (Qlg). Higher ridges of Miocene to Pliocene andesitic flows (Thma, Tbmb) are found southwest of the Project and Pleistocene basalt (Qsb) in the northeast and southwest (Grose and Porro, 1993). Of these units, the Pleistocene lake deposits and recent alluvium are further elaborated upon.

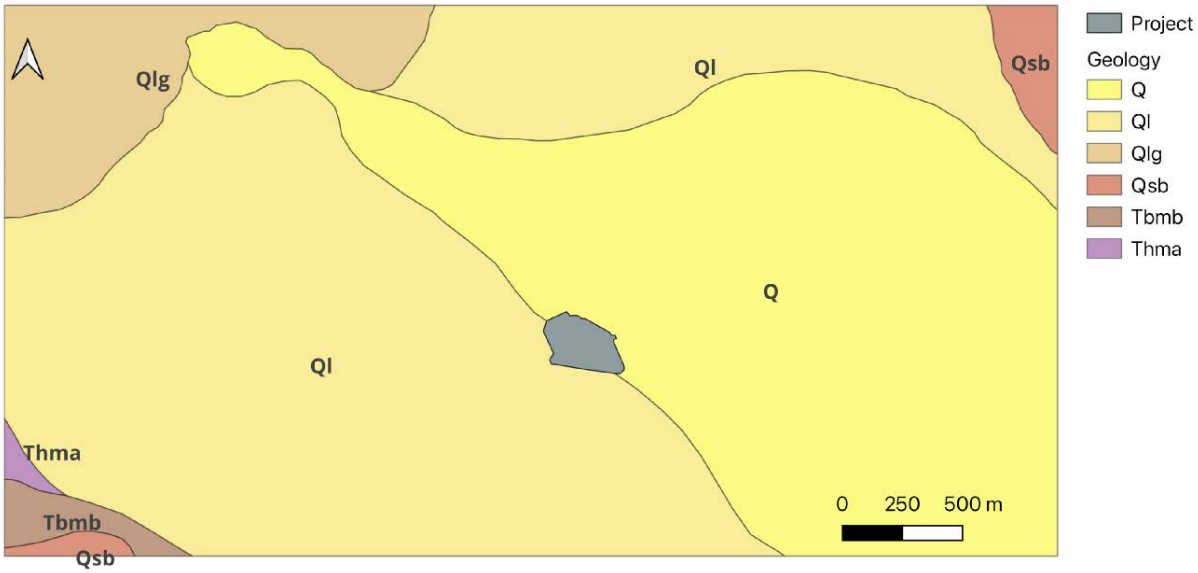


Figure 3. Geological map for the Proposed Loves Station Project.
Qa=Alluvium; Ql=Lahontan lake beds; Qlg=Lahontan gravels; Qsb=Basalt of Susanville; Tbmb=Andesite breccia of Bald Mountain; Thma=Mafic andesite of Highway 36. From Grose and Porro (1993). Scale bar=2,000 feet.

Table 1. Geological Units near the Project Area (Grose and Porro (1993).

Map	Unit	Description
Qa	Alluvium (Holocene)	Sand, silt, and gravel; fluvial deposits along modern drainages.
Ql	Nearshore deposits of Lake Lahontan (Pleistocene)	Clay, sand, and silt.
Qlg	Gravel deposits of Lake Lahontan (Pleistocene)	Gravel, sand, and silt; locally thick accumulations.
Qsb	Basalt of Susanville (Pleistocene)	Dark grey to black aphanitic, occasionally porhyritic basaltic volcanic flows.
Thma	Mafic andesite of Highway 36 (Pliocene)	Light to dark grey, pyroxene and plagioclase porphyritic flows and tuff.
Tbmb	Andesite breccia of Bald Mountain (Miocene)	Pyroxene amphibolite volcanic flows and lahars. Occasional lenses of lacustrine and fluvial sediments.

PALEONTOLOGICAL RECORDS RESULT

The records search from the University of California Museum of Paleontology (UCMP) yielded several localities in close proximity to the Project. UCMP V79031 is located approximately two miles northeast of the Project and yielded a rare Pleistocene pika jaw. The fossil was collected from beds mapped as Quaternary lacustrine (Ql) on the map of Grose and Porro (1993).

An additional search of the online holdings of the UCMP in April, 2025, yielded 585 records from the Pleistocene of Lassen County. While specific localities and facies could not be obtained from the data, the records do paint a picture of preservation of diverse Ice Age animals in the region. 29 unique field localities are registered, yielding primarily fish fossils (429 records), followed by mammals (122), and more rare invertebrates (28), reptiles (4), and birds (2). The mammals include bison, horses, camelids, and mammoths, though most records are not defined to genus level.

LITERATURE SEARCH RESULTS

A search of the American Geological Institute database did not yield any additional fossils from the Pleistocene of Lassen County. However, projects that were completed in the Lahontan Lake sediments south of Susanville on federally-managed properties have yielded diverse terrestrial mammals and bird fossils (BLM records).

RESULTS AND SENSITIVITY

As a result of the literature analysis and museum records, the Quaternary lake deposits of Lake Lahontan are considered **high sensitivity** for paleontological resources. There is sufficient evidence to show that the facies and age have a strong potential to preserve scientifically-significant fossils. The Quaternary Alluvium is too young by the standards of both the SVP (2010) and federal agencies to host paleontological resources, thus is ranked **low sensitivity**. However, the alluvium fills channels that were carved into the lake deposits and may increase to **high sensitivity** at depth.

PALEONTOLOGICAL RESOURCE IMPACT MITIGATION PROGRAM (PRIMP)

It is the professional opinion of Sub-Terra that the proposed Susanville Travel Stop Project has the potential to impact scientifically-significant paleontological resources if excavation activities into the Pleistocene lake sediments (Ql) are not monitored. In an effort to mitigate potential adverse impacts to paleontological resources to a less than significant level as per CEQA guidelines, the following measures are recommended:

- Prior to the start of construction activities, the Applicant should retain a federally-qualified Paleontologist that meets the standards of the Society for Vertebrate Paleontology (2010) to carry out all mitigation measures related to paleontological resources.

- Prior to start of any ground disturbing activities, the qualified Paleontologist should conduct pre-construction worker paleontological resources sensitivity training. The qualified Paleontologist should contribute to any construction worker paleontological resources sensitivity training either in person or via a training module. The training should include information on what types of paleontological resources could be encountered during excavations, what to do in case an unanticipated discovery is made by a worker, and laws protecting paleontological resources. All

construction personnel should be informed of the possibility of encountering fossils and instructed to immediately inform the construction foreman or supervisor if any bones or other potential fossils are unexpectedly unearthed in an area where a paleontological monitor is not present. The Applicant should ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

- The qualified Paleontologist should supervise a paleontological monitor meeting the Society for Vertebrate Paleontology standards (2010) who should be present during all excavations in the Quaternary lake sediments or when excavations in the alluvium are deep enough to encounter the older Pleistocene lake sediments. The exceptions are borings or auguring less than 3 feet in diameter. Specific depths and monitoring locations will be based on the finalized excavation plans, any available geotechnical reports, and consultation between the qualified Paleontologist and the construction liaison.

Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry screened standard sediment samples (up to 4.0 cubic yards) of promising horizons for smaller fossil remains (SVP, 2010). Depending on the conditions encountered, full-time monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the qualified Paleontologist, particularly if excavation is limited to artificial fill or the younger alluvium. The qualified Paleontologist may spot check the excavation on an intermittent basis and recommend whether the depth of required monitoring should be revised based on his/her observations. Monitoring activities should be documented in a Paleontological Resources Monitoring Report to be prepared by the Qualified Paleontologist at the completion of construction and shall be provided to the Applicant within six (6) months of Project completion. If fossil resources are identified during monitoring, the report will also be filed with the University of California Museum of Paleontology or other similar repository.

- If a paleontological resource is discovered during construction, the paleontological monitor should be empowered to temporarily divert or redirect grading and excavation activities in the area of the exposed resource to facilitate evaluation of the discovery. An appropriate buffer area of 50 feet around the fossil discovery should be established by the qualified Paleontologist where construction activities should not be allowed to continue. Work should be allowed to continue outside of the buffer area. All significant fossils should be collected by the paleontological monitor and/or the qualified Paleontologist. Collected fossils should be prepared to the point of identification and catalogued before they are submitted to their final repository. Any fossils collected should be curated at a public, non-profit institution with a research interest in the materials, such as the UCMP, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, photographs, and a technical report shall also be filed at the repository and/or school.

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Clynne, M.A., Calvert, A.T., Champion, D.E., Muffler, L.J.P., Sawlan, M.G., and Downs, D.T., 2017, Age of the youngest volcanism at Eagle Lake, northeastern California—40Ar/39Ar and paleomagnetic results: U.S. Geological Survey Open-File Report 2017–1027, 24 p., https://doi.org/10.3133/ofr20171027.

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Murphey, P.C. and Daitch, D., 2007, Paleontological overview of oil shale and tar sands areas in Colorado, Utah and Wyoming. U.S. Department of Energy, Argonne National Laboratory. Report prepared for the U.S. Department of Interior Bureau of Land Management, 468 p. and 6 maps. 1:500,000.

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Society of Vertebrate Paleontology, 2010, Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Available at: https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines.pdf. Accessed April, 2025.

Appendix H

Noise Measurement Data and Noise Modeling Calculations

Attenuation Calculations for Stationary Noise Sources

KEY: Orange cells are for input.
Grey cells are intermediate calculations performed by the model.
Green cells are data to present in a written analysis (output).

STEP 1: Identify the noise source and enter the reference noise level (dBA and distance).

STEP 2: Select the ground type (hard or soft), and enter the source and receiver heights.

STEP 3: Select the distance to the receiver.

Noise Source/ID	Reference Noise Level			Attenuation Characteristics				Attenuated Noise Level at Receptor		
	noise level (dBA)	@	distance (ft)	Ground Type (soft/hard)	Source Height (ft)	Receiver Height (ft)	Ground Factor	noise level (dBA)	@	distance (ft)
3 Commercial HVACs (Daytime Standard)	79.5	@	50	soft	5	5	0.58	65.0	@	182
3 Commercial HVACs (Evening Standard)	79.5	@	50	soft	5	5	0.58	60.0	@	285
3 Commercial HVACs (Nighttime Standard)	79.5	@	50	soft	5	5	0.58	55.0	@	445
3 Commercial HVACs @ Closest Receptor	79.5	@	50	soft	5	5	0.58	51.6	@	600
Peak Parking Activity @ Closest Receptor	69.0	@	50	soft	5	5	0.58	43.2	@	500
Peak Parking Activity (Daytime Standard)	69.0	@	50	soft	5	5	0.58	65.0	@	71
Peak Parking Activity (Evening Standard)	69.0	@	50	soft	5	5	0.58	60.0	@	112
Peak Parking Activity (Nighttime Standard)	69.0	@	50	soft	5	5	0.58	55.0	@	174
Drive-Thru (Daytime Standard)	51.0	@	54	soft	5	5	0.58	65.0	@	15
Drive-Thru (Evening Standard)	51.0	@	54	soft	5	5	0.58	60.0	@	24
Drive-Thru (Nighttime Standard)	51.0	@	54	soft	5	5	0.58	55.0	@	38
Drive Thru @ Closest Receptor	51.0	@	54	soft	5	5	0.58	28.6	@	400

Notes:

Estimates of attenuated noise levels do not account for reductions from intervening barriers, including walls, trees, vegetation, or structures of any type.

Computation of the attenuated noise level is based on the equation presented on pg. 176 and 177 of FTA 2018.

Computation of the ground factor is based on the equation presentd in Table 4-26 on pg. 86 of FTA 2018, where the distance of the reference noise leve can be adjusted and the usage factor is not applied (i.e., the usage factor is equal to 1).

Sources:

Federal Transit Association (FTA). 2018 (September). Transit Noise and Vibration Impact Assessment. Washington, D.C. Available: <http://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf>Accessed:

Parking Lot Noise Calculation

KEY:	Orange cells are for input.
	Green cells are data to present in a written analysis (output).

Number of automobiles per hour	153
Number of buses per hour	52
Distance to receptor 1 (ft)	770
Distance to receptor 2 (ft)	200

		distance	sound level
Rerence Level	Leq @	50	**68.9**
Receptor 1	Leq @	770	**45.2**
Receptor 2	Leq @	200	**56.9**

Source

Federal Transit Administration. 2018 (September). Transit Noise and Vibration Impact Assessment. Washington, D.C. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed February 4, 2019. See pages 45–47, including Equation 4-14.

Construction Equipment Average Noise Levels

Project Name: Susanville Travel Stop

KEY: Orange cells are for input.

Grey cells are intermediate calculations performed by the model.

Green cells are data to present in a written analysis (output).

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (dBA L_{eq})	Equipment[1]	Reference Emission Noise Levels (dBA L_{max}) at 50 feet[2]	Usage Factor[2]
Threshold	32	90.0	Concrete Saw	90	0.2
Residence 1	980	50.7	Scraper	84	0.4

Ground Type	Soft
Source Height	8
Receiver Height	5
Ground Factor[3]	0.63

Predicted Noise Level [4]	dBA L_{eq} at 50 feet[4]
Concrete Saw	83.0
Scraper	80.0

Combined Predicted Noise Level (dBA L_{eq} at 50 feet)
84.8

Sources:

[1]Where measured values are not available, noise levels based on the Construction Noise Control Specifiction 721.560 were used.

[2] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[3] Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2018 (pg 86).

[4] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2018 (pg 177).

L_{eq}(equip) = E.L.+10*log (U.F.) - 20*log (D/50) - 10*G*log (D/50)

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2018: pg 86); and

D = Distance from source to receiver.

Construction Equipment Maximum Noise Levels

Project Name: Susanville Travel Stop

KEY: Orange cells are for input.

Grey cells are intermediate calculations performed by the model.

Green cells are data to present in a written analysis (output).

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (dBA L_{max})	Equipment[1]	Reference Emission Noise Levels (dBA L_{max}) at 50 feet[2]
Threshold	55	90.0	Concrete Saw	90
Residence 1	600	62.5	Scraper	84

Ground Type	Soft
Source Height	8
Receiver Height	5
Ground Factor[3]	0.63

Predicted Noise Level [4]	dBA L_{max} at 50 feet[4]
Concrete Saw	90.0
Scraper	84.0

Combined Predicted Noise Level (dBA L_{max} at 50 feet)
91.0

Sources:

[1] Where measured values are not available, noise levels based on the Construction Noise Control Specifiction 721.560 were used.

[2] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[3] Based on Figure 4-26 from the Federal Transit Noise and Vibration Impact Assessment, 2018 (pg 86).

[4] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2018 (pg 177).

L_{eq}(equip) = E.L.+10*log (U.F.) - 20*log (D/50) - 10*G*log (D/50)

Where: E.L. = Emission Level;

U.F.= Usage Factor, assumed to be 1 for the purposes of the calculation of maximum noise levels;

G = Constant that accounts for topography and ground effects (FTA 2018: pg 86); and

D = Distance from source to receiver.

Attenuation Calculations for Stationary Noise Sources

KEY: Susanville Travel Stop

Grey cells are intermediate calculations performed by the model.

Green cells are data to present in a written analysis (output).

STEP 1: Identify the noise source and enter the reference noise level (dBA and distance).

STEP 2: Select the ground type (hard or soft), and enter the source and receiver heights.

STEP 3: Select the distance to the receiver.

Noise Source/ID	Reference Noise Level			Attenuation Characteristics				Attenuated Noise Level at Receptor		
	noise level (dBA)	@	distance (ft)	Ground Type (soft/hard)	Source Height (ft)	Receiver Height (ft)	Ground Factor	noise level (dBA)	@	distance (ft)
Helicopter	79.5	@	50	soft	6	5	0.65	79.5	@	50
chipper	99.0	@	3	soft	6	5	0.65	67.7	@	50
blasting (night lmax)	94.0	@	50	soft	6	5	0.65	65.0	@	620
helicopter (night leq)	68.0	@	492.00	soft	6	5	0.65	45.1	@	3600
blasting (day lmax)	94.0	@	50	soft	6	5	0.65	70.1	@	400
helicopter (day leq)	68.0	@	492	soft	6	5	0.65	55.0	@	1520
Blasting (SF Res)	94.0	@	50	soft	6	5	0.65	79.6	@	175
blasting	94.0	@	50	soft	6	5	0.65	86.0	@	100
construction	85.0	@	50	soft	6	5	0.65	93.0	@	25
construction	95.0	@	50	soft	6	5	0.65	103.0	@	25
							0.66			
							0.66			
							0.66			
							0.66			

Notes:

Estimates of attenuated noise levels do not account for reductions from intervening barriers, including walls, trees, vegetation, or structures of any type.

Computation of the attenuated noise level is based on the equation presented on pg. 12-3 and 12-4 of FTA 2006.

Computation of the ground factor is based on the equation presentd in Figure 6-23 on pg. 6-23 of FTA 2006, where the distance of the reference noise leve can be adjusted and the usage factor is not applied (i.e., the usage factor is equal to 1).

Sources:

Federal Transit Association (FTA). 2006 (May). Transit Noise and Vibration Impact Assessment. FTA-VA-90-1003-06. Washington, D.C. Available: <http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf>. Accessed: September 24, 2010.

Traffic Noise Spreadsheet Calculator

Project: **Susanville Travel Stop**

Number	Segment Description and Location: Name	From	To	Existing Conditions	Existing + Project Conditions	Δ Existing – Existing + Project
Summary of Net Changes						
1	SR 36	North of Skyline Road	Riverside Drive	61.6	62.4	0.9
2	SR 36	South of Skyline Road	Richmond Road	64.4	64.7	0.2
3	Skyline Road	East of SR 36	Johnstonville Road	50.9	51.7	0.8
4	Skyline Road[1]	West of SR 36	Project Driveway B	54.5	55.7	1.2

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

[1] Existing noise levels are quantified using noise level measurements taken at LT-1 (See Appendix for more detailed noise data)

Traffic Noise Spreadsheet Calculator

Project: Susanville Travel Stop

Noise Level Descriptor: Ldn
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

Segment Description and Location				Input									Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics					Ldn,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Night	(dBA)[5,6,7]	65 dBA	60 dBA	55 dBA	50 dBA
Existing Conditions																	
1	SR 36	North of Skyline Road	Riverside Drive	14,000	50	235	270	91.7%	0.3%	8.0%	87.4%	12.6%	61.6	149	321	692	1492
2	SR 36	South of Skyline Road	Richmond Road	15,300	50	165	180	91.7%	0.3%	8.0%	87.4%	12.6%	64.4	158	340	733	1579
3	Skyline Road	East of SR 36	Johnstonville Road	1,800	35	155	180	94.2%	0.2%	5.6%	87.4%	12.6%	50.9	19	42	89	193
4	Skyline Road	West of SR 36	Project Driveway B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Traffic Noise Spreadsheet Calculator

Project: Susanville Travel Stop

Noise Level Descriptor: Ldn
Site Conditions: Soft
Traffic Input: ADT
Traffic K-Factor: 10

Segment Description and Location				Input									Output				
						Distance to Directional Centerline, (feet)[4]		Traffic Distribution Characteristics					Ldn,	Distance to Contour, (feet)[3]			
Number	Name	From	To	ADT	Speed (mph)	Near	Far	% Auto	% Medium	% Heavy	% Day	% Night	(dBA)[5,6,7]	65 dBA	60 dBA	55 dBA	50 dBA
Existing + Project Conditions																	
1	SR 36	North of Skyline Road	Riverside Drive	17,050	50	235	270	91.7%	0.3%	8.0%	87.4%	12.6%	62.4	170	367	790	1701
2	SR 36	South of Skyline Road	Richmond Road	16,132	50	165	180	91.7%	0.3%	8.0%	87.4%	12.6%	64.7	164	352	759	1636
3	Skyline Road	East of SR 36	Johnstonville Road	2,170	35	155	180	94.2%	0.2%	5.6%	87.4%	12.6%	51.7	22	47	101	218
4	Skyline Road	West of SR 36	Project Driveway B	4,252	25	480	505	66.1%	0.1%	32.8%	80.0%	5.0%	49.5	46	99	213	458

*All modeling assumes average pavement, level roadways (less than 1.5% grade), constant traffic flow and does not account for shielding of any type or finite roadway adjustments. All levels are reported as A-weighted noise levels.

Citation #	Citations	
1	Caltrans Technical Noise Supplement. 2009 (November). Table (5-11), Pg 5-60.	Caltrans Technical Noise Supplement. 2013 (September). Table (4-2), Pg 4-17.
2	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-26), Pg 5-60.	Caltrans Technical Noise Supplement. 2013 (September). Equation (4-5), Pg 4-17.
3	Caltrans Technical Noise Supplement. 2009 (November). Equation (2-16), Pg 2-32.	FHWA 2004 TNM Version 2.5
4	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-11), Pg 5-47, 48.	FHWA 2004 TNM Version 2.5
5	Caltrans Technical Noise Supplement. 2009 (November). Equation (2-26), Pg 2-55, 56.	Caltrans Technical Noise Supplement. 2013 (September). Equation (2-23), Pg 2-51, 52.
6	Caltrans Technical Noise Supplement. 2009 (November). Equation (2-27), Pg 2-57.	Caltrans Technical Noise Supplement. 2013 (September). Equation (2-24), Pg 2-53.
7	Caltrans Technical Noise Supplement. 2009 (November). Pg 2-53.	Caltrans Technical Noise Supplement. 2013 (September). Pg 2-57.
8	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-7), Pg 5-45.	FHWA 2004 TNM Version 2.5
9	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-8), Pg 5-45.	FHWA 2004 TNM Version 2.5
10	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-9), Pg 5-45.	FHWA 2004 TNM Version 2.5
11	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-13), Pg 5-49.	FHWA 2004 TNM Version 2.5
12	Caltrans Technical Noise Supplement. 2009 (November). Equation (5-14), Pg 5-49.	FHWA 2004 TNM Version 2.5
13	Federal Highway Administration Traffic Noise Model Technical Manual. Report No. FHWA-PD-96-010. 1998 (January). Equation (16), Pg 67	
14	Federal Highway Administration Traffic Noise Model Technical Manual. Report No. FHWA-PD-96-010. 1998 (January). Equation (20), Pg 69	
15	Federal Highway Administration Traffic Noise Model Technical Manual. Report No. FHWA-PD-96-010. 1998 (January). Equation (18), Pg 69	

References

California Department of Transportation (Caltrans). 2009 (November). Technical Noise Supplement. Available: http://www.dot.ca.gov/hq/env/noise/pub/tens_complete.pdf. Accessed August 17, 2017.

California Department of Transportation (Caltrans). 2013 (September). Technical Noise Supplement. Available: http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013A.pdf. Accessed August 17, 2017.

Federal Highway Administration. 2004. Traffic Noise Model Version 2.5. Available: https://www.fhwa.dot.gov/environment/noise/traffic_noise_model/tnm_v25/. Accessed August 17, 2017.

Distance Propagation Calculations for Stationary Sources of Ground Vibration

KEY: Orange cells are for input.

Grey cells are intermediate calculations performed by the model.

Green cells are data to present in a written analysis (output).

STEP 1: Determine units in which to perform calculation.

— If vibration decibels (VdB), then use Table A and proceed to Steps 2A and 3A.

— If peak particle velocity (PPV), then use Table B and proceed to Steps 2B and 3B.

STEP 2A: Identify the vibration source and enter the reference vibration level (VdB) and distance.

STEP 3A: Select the distance to the receiver.

Table A. Propagation of vibration decibels (VdB) with distance

Noise Source/ID	Reference Noise Level			Attenuated Noise Level at Receptor		
	vibration level (VdB)	@	distance (ft)	vibration level (VdB)	@	distance (ft)
Vibratory Roller	94	@	25	80	@	73
					@	

The Lv metric (VdB) is used to assess the likelihood for vibration to result in human annoyance.

STEP 2B: Identify the vibration source and enter the reference peak particle velocity (PPV) and distance.

STEP 3B: Select the distance to the receiver.

Table B. Propagation of peak particle velocity (PPV) with distance

Noise Source/ID	Reference Noise Level			Attenuated Noise Level at Receptor		
	vibration level (PPV)	@	distance (ft)	vibration level (PPV)	@	distance (ft)
Vibratory Roller	0.210	@	25	0.198	@	26

The PPV metric (in/sec) is used for assessing the likelihood for the potential of structural damage.

Construction Vibration Damage Criteria		
Building/Structural Category	PPV, in/sec	Approximate Lv
I. Reinforced-concrete, steel or timber (no plaster)	0.5	102
II. Engineerd concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildng	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Source: Federal Transit Administration, pg 186

Long-Term Noise Measurement Summary

KEY: Orange cells are for input.

Grey cells are intermediate calculations performed by the model.

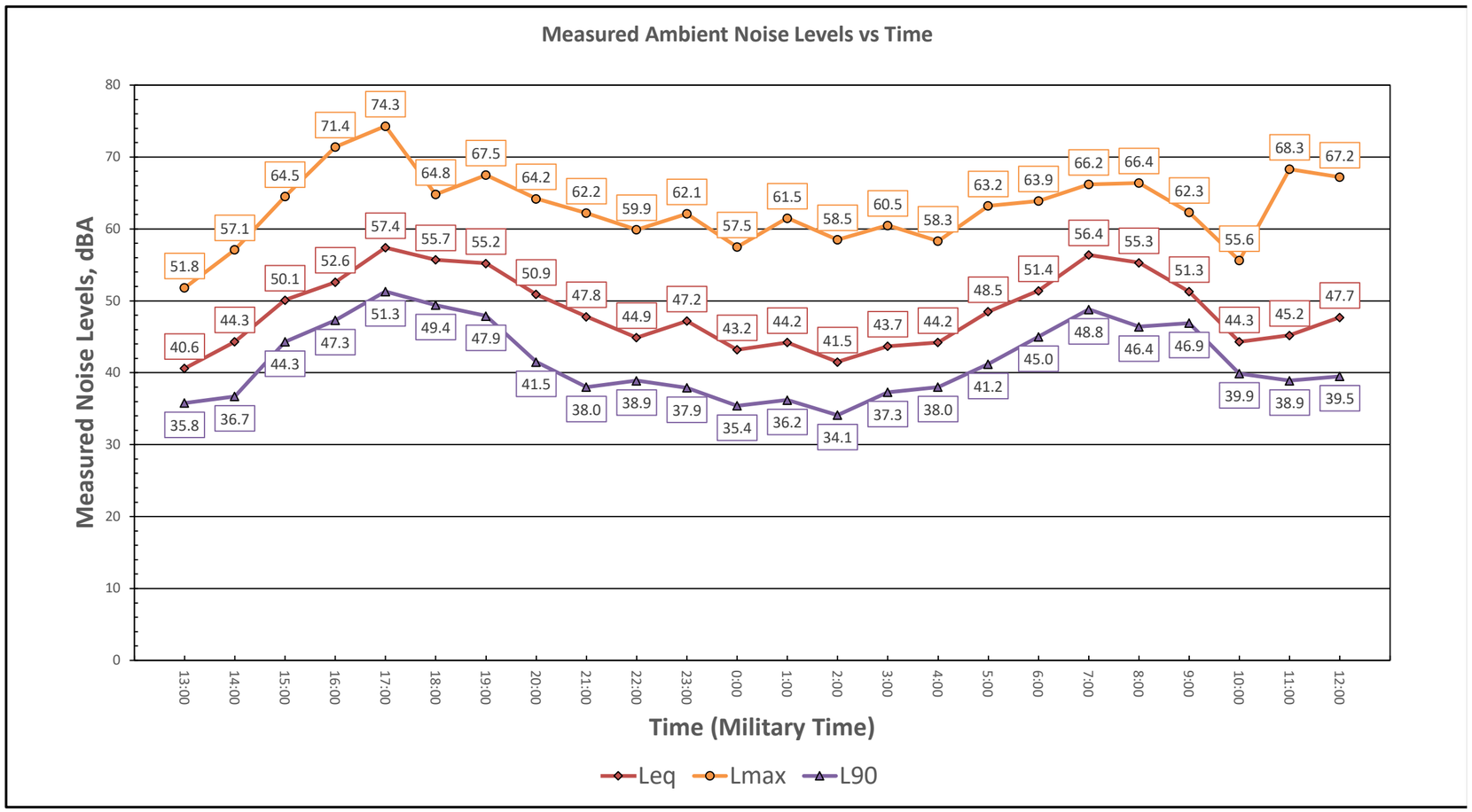
Green cells are data to present in a written analysis (output).

Measurement Site:	Center of Project Site
Measurement Date:	January 16th to January 17th
Project Name:	Susanville Travel Stop
Coordinates	40°23'59.16"N, 120°37'56.90"W

No.	Time	Measured Level, dBA			
		Leq	Lmax	L50	L90
1	13:00	40.6	51.8	39.2	35.8
2	14:00	44.3	57.1	40.7	36.7
3	15:00	50.1	64.5	48.7	44.3
4	16:00	52.6	71.4	51.1	47.3
5	17:00	57.4	74.3	55.8	51.3
6	18:00	55.7	64.8	54.1	49.4
7	19:00	55.2	67.5	53.4	47.9
8	20:00	50.9	64.2	48.5	41.5
9	21:00	47.8	62.2	43.3	38.0
10	22:00	44.9	59.9	42.3	38.9
11	23:00	47.2	62.1	41.9	37.9
12	0:00	43.2	57.5	38.1	35.4
13	1:00	44.2	61.5	38.3	36.2
14	2:00	41.5	58.5	36.5	34.1
15	3:00	43.7	60.5	39.8	37.3
16	4:00	44.2	58.3	41.3	38.0
17	5:00	48.5	63.2	45.5	41.2
18	6:00	51.4	63.9	49.8	45.0
19	7:00	56.4	66.2	55.0	48.8
20	8:00	55.3	66.4	51.8	46.4
21	9:00	51.3	62.3	50.1	46.9
22	10:00	44.3	55.6	42.6	39.9
23	11:00	45.2	68.3	42.1	38.9
24	12:00	47.7	67.2	43.4	39.5

Metrics	Leq	Lmax	L50	L90
Day Average	52.7	67.3	50.8	45.6
Night Average	46.5	61.1	43.6	39.5

Ldn	54.5
Day %	87.4%
Night %	12.6%



Notes:
Computation of the CNEL based on 1-hour Leq measurements for each hour of a day are based on equation 2-27 on pg. 2-57 of Caltrans 2009.
Computation of the Ldn based on 1-hour Leq measurements for each hour of a day are based on equation 2-26 on pg. 2-56 of Caltrans 2009.
Log factors for the Ldn and CNEL penalties are provided in Table 2-12 on pg. 2-52 of Caltrans 2009.
Source:
California Department of Transportation (Caltrans), Division of Environmental Analysis. 2009 (November). 2009 Technical Noise Supplement. Sacramento, CA. Available: <http://www.dot.ca.gov/hq/env/noise/>. Accessed September 24, 2010.

Appendix I

Transportation Impact Analysis Report

Final

CEQA Transportation Impact Analysis Report for Love's Travel Stop in Susanville, CA

Prepared for:

Ascent Environmental

August 2025

RS24-4358

FEHR PEERS

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1. INTRODUCTION

This chapter describes this report's purpose, provides a brief overview of the proposed project, lists applicable transportation-related policies that pertain to the proposed project under the California Environmental Quality Act (CEQA), and summarizes the transportation-related comments made by organizations and agencies on the Notice of Preparation (NOP) for this Environmental Impact Report (EIR).

Report Purpose

This CEQA Transportation Impact Analysis Report will serve as an appendix to the project's EIR. It focuses on the project's impacts to the transportation system based on its vehicle miles traveled (VMT). It also evaluates impacts to bicycle/pedestrian facilities, transit facilities and services, and roadway safety-related impacts including queuing and nonstandard design features.

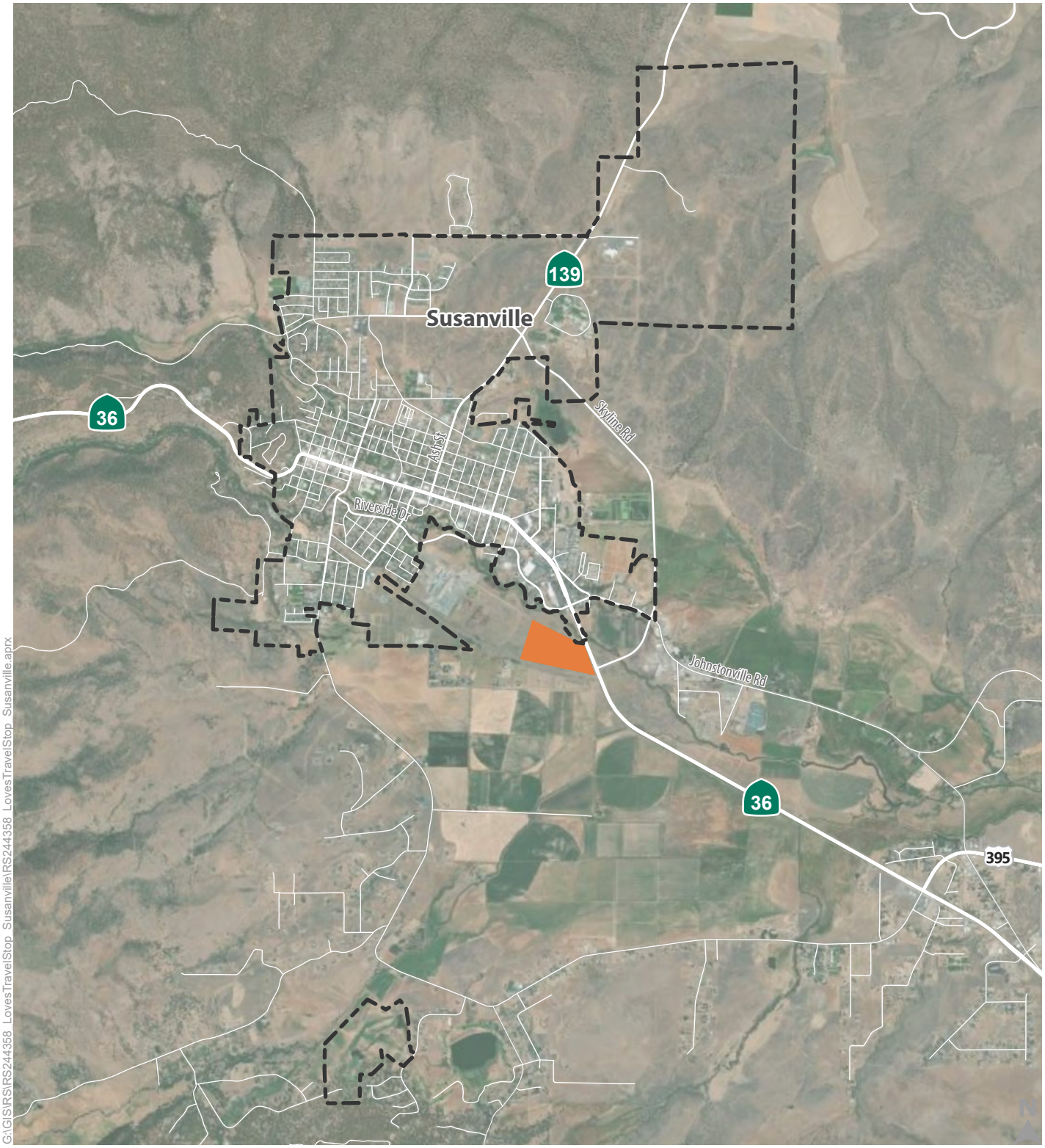
Project Location and Overview

The Love's Travel Stop in Susanville, CA ("proposed project") would be situated on a vacant parcel located directly west of State Route (SR) 36 opposite Skyline Road in Lassen County. If approved, the project site would be annexed into the City of Susanville, whose current southern City limits abut much of the northern edge of the project site. **Figure 1** shows the project location.

Figure 2 shows the project site plan (*Travel Stop Site Plan*, Lane Engineers, 2024). Its trip generating land uses include the following:

- 4 truck fueling lanes/positions and 70 truck parking spaces
- 12 vehicle (auto) fueling pump positions
- 7,943 sq. ft. convenience store
- 3,474 sq. ft. fast-food restaurant with drive-through window
- 1,588 sq. ft. fast-food restaurant without drive-through window
- 10 overnight RV parking spaces

The proposed project would be accessed exclusively by a fourth (west) leg to the SR 36/Skyline Road signalized intersection. Turn lanes would be added on SR 36 to accommodate movements into and out of this new leg. More details regarding project access are provided in Chapter 3.



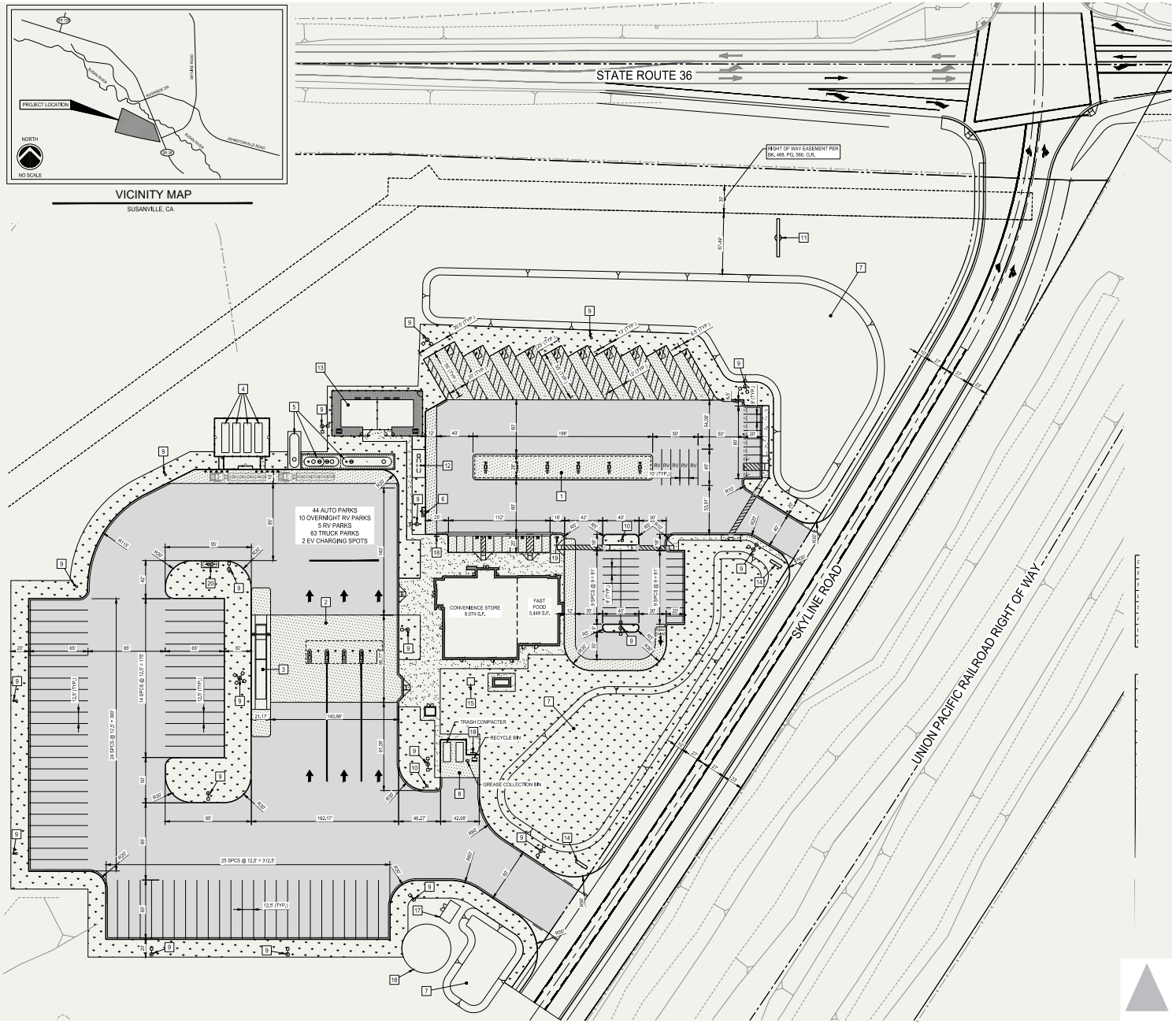
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Project Site

Susanville City Limit

Figure 1

Project Location



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Figure 2

Site Plan

Applicable Transportation-Related Policies

This section presents federal, state, regional, and local regulatory requirements applicable to the project.

Pursuant to Senate Bill (SB) 743, Public Resources Code (PRC) Section 21099, and California Code of Regulations (CCR), Title 14, Section 15064.3, generally, VMT has replaced congestion as the metric for determining transportation impacts under CEQA. Section 15064.3 of the CEQA Guidelines provides that VMT is the "most appropriate measure of transportation impacts" and mandates analysis of VMT impacts effective July 1, 2020. A project's effect on automobile delay is no longer a consideration when identifying a significant impact; therefore, the impact of the project on delay-based traffic operations is not addressed in this EIR.

FEDERAL

Depending on the types of off-site improvements needed, policies of the Federal Highway Administration (FHWA) and other federal agencies may be applicable.

Surface Transportation Assistance Act (STAA)

The STAA of 1982 allows large trucks to operate on the Interstate and certain primary routes called collectively the National Network. These trucks, referred to as STAA trucks, are longer than California legal trucks. As a result, STAA trucks have a larger turning radius than most local roads can accommodate. On surface streets, STAA routes are designated either as Terminal or Service Access routes. Terminal routes are approved by the agency with jurisdiction over the roadway to enable the truck to reach its ultimate destination. Service Access routes allow STAA trucks to exit the interstate onto a local road for up to one mile to access food, fuel, lodging, or repairs.

Federal Motor Carrier Safety Administration (FMCSA)

The FMCSA has policies that relate to the hours of service for truck drivers. While not directly applicable to the entitlement review process per se, those policies indirectly influence the project's travel behavior. Specifically, the following regulations apply to truck drivers transporting property:

- They may drive a maximum of 11 hours after 10 consecutive hours off duty.
- They may not drive beyond the 14th consecutive hour after coming on duty, following 10 consecutive hours off duty. Off-duty time does not extend the 14-hour period.
- They must take a 30-minute break when they have driven for a period of 8 cumulative hours without at least a 30-minute interruption. The break may be satisfied by any non-driving period of 30

consecutive minutes (i.e., on-duty not driving, off-duty, sleeper berth, or any combination of these taken consecutively).

- They may not drive after 60/70 hours on duty within 7/8 consecutive days. A driver may restart a 7/8 consecutive day period after taking 34 or more consecutive hours off duty.

Key takeaways from these somewhat complicated rules are that truck drivers must take breaks after driving a certain number of consecutive hours. This applies to trucks on SR 36 in the project vicinity, where there are no large truck stops for some distance from the project site.

STATE

The State of California has enacted several pieces of legislation that outline the state's commitment to encourage land use and transportation planning decisions and investments that reduce VMT and contribute to reductions in greenhouse gas (GHG) emissions in line with state climate goals. Other recent state policies pertain to roadway safety.

Senate Bill 743

SB 743, passed in 2013, required the California Governor's Office of Planning and Research (OPR) (now called the Governor's Office of Land Use and Climate Innovation [LCI]) to develop new guidelines that address transportation metrics under CEQA. Enacted as part of SB 743 (2013), PRC section 21099, subdivision (b)(1), directed the OPR to prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed CEQA Guidelines addressing "criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In developing the criteria, [OPR] shall recommend potential metrics to measure transportation impacts that may include, but are not limited to, vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated."

Subdivision (c)(1) of PRC section 21099 gave OPR additional authority to "adopt guidelines pursuant to Section 21083 establishing alternative metrics to the metrics used for traffic levels of service for transportation impacts outside transit priority areas." In other words, the new rules could apply either just to transit priority areas or could extend beyond them as well.

Subdivision (b)(2) of PRC section 21099 further provides that "[u]pon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to [CEQA], except in locations specifically identified in the guidelines, if any."

OPR published its proposal for the comprehensive updates to the CEQA Guidelines in November 2017, which included proposed updates related to analyzing transportation impacts pursuant to SB 743. The new rules governed the entire State of California, and not just transit priority areas. The updated CEQA Guidelines were adopted on December 28, 2018; and according to the new CEQA Guidelines Section 15064.3, VMT replaced congestion as the metric for determining transportation impacts. The guidelines state that "lead agencies may elect to be governed by these provisions of this section immediately. Beginning July 1, 2020, the provisions of this section shall apply statewide."

OPR published the *Technical Advisory on Evaluating Transportation Impacts in CEQA* ("*Technical Advisory*") in December 2018 to provide guidance to agencies implementing the new CEQA requirements.

CEQA Guidelines Section 15064.3

As stated above, changes to the CEQA Guidelines a few years ago include the adoption of section 15064.3, Determining the Significance of Transportation Impacts. Section 15064.3 establishes VMT as the most appropriate measure of transportation impacts. A lead agency has discretion to choose the most appropriate methodology to evaluate VMT, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may also use models to estimate VMT and may revise those estimates to reflect professional judgment based on substantial evidence. Additionally, a lead agency may evaluate factors such as the availability of transit and proximity to other destinations to qualitatively analyze a project's potential VMT impacts.

Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR, 2018)

The *Technical Advisory* provides advice and recommendations to CEQA lead agencies on how to implement the changes made in section 15064.3. This includes technical recommendations regarding the assessment of VMT, thresholds of significance, VMT mitigation measures, and screening thresholds for certain land use projects. Lead agencies may consider and use these recommendations at their discretion and with the provision of substantial evidence to support alternative approaches. The *Technical Advisory* describes considerations agencies may use in selecting VMT metrics, calculation methodologies, and significance thresholds. The *Technical Advisory* does not mandate the use of specific metrics, methodologies or significance thresholds, because agencies have discretion to select those that are appropriate for the local land use and transportation context.

Regarding retail projects, the *Technical Advisory* recommends that "[g]enerally, lead agencies should analyze the effects of a retail project by assessing the change in total VMT because retail projects typically re-route travel from other retail destinations. A retail project might lead to increases or decreases in VMT, depending on previously existing retail travel patterns." The "change in total VMT" method includes evaluation of a

project's likelihood of diverting existing trips and the effect of such diversion on total VMT. The *Technical Advisory* also recommends that the "analysis should address the full area over which the project affects travel behavior, even if the effect on travel behavior crosses political boundaries."

The *Technical Advisory* also acknowledges that significance thresholds may be best determined on a case-by-case basis in rural areas. In setting thresholds for unique land use types or specific projects, the *Technical Advisory* recommends that "lead agencies should consider the purposes described in section 21099 of the Public Resources Code and regulations in the CEQA Guidelines on the development of thresholds of significance (e.g., CEQA Guidelines, § 15064.7)."

The *Technical Advisory* identifies the following recommended numeric VMT thresholds for office and retail projects:

- Office projects that would generate vehicle travel exceeding 15 percent below (i.e., greater than 85 percent of) existing regional VMT per employee may indicate a significant transportation impact.
- Retail projects (and other non-residential/non-office projects) that result in a net increase in total VMT may indicate a significant transportation impact.

The *Technical Advisory* offers guidance regarding the above project types because "they tend to have the greatest influence on VMT".

Regarding trucks, the *Technical Advisory* first points out that CEQA Section 15064 refers to automobiles when referencing VMT. The document then offers a definition that automobiles consist of on-road passenger vehicles, including cars and light duty trucks. It further states that "Heavy-duty truck VMT could be included for modeling convenience and ease of calculation." No further guidance is provided relating to how to address travel impacts of trucks, though Appendix 1 (Considerations About Which VMT to Count) and Appendix 2 (Induced Travel: Mechanisms, Research, and Additional Assessment Approaches) repeatedly refer to automobiles (and do not mention trucks) when describing these topics.

Caltrans

Caltrans is responsible for planning, designing, constructing, operating, and maintaining the State Highway System (SHS). Any improvements or modifications to the SHS within the study area would need to be approved by Caltrans. The following Caltrans planning documents emphasize the State of California's focus on transportation infrastructure that supports mobility choice through multimodal options, smart growth, and efficient development:

- Smart Mobility Framework (Caltrans February 2010),
- Complete Streets Implementation Action Plan (Caltrans 2010),

- California Transportation Plan 2040 (Caltrans 2016),
- Strategic Management Plan 2015-2020 – 2019 Update (Caltrans 2019),
- State Highway System Management Plan (Caltrans 2019),
- VMT-Focused Transportation Impact Study Guide (Caltrans 2020), and
- Caltrans 2020–2024 Strategic Plan (Caltrans 2021).

Among these various reports, the following two documents are most applicable to the project.

VMT-Focused Transportation Impact Study Guide (TISG)

On May 20, 2020, the *VMT-Focused Transportation Impact Study Guide ("TISG")* was adopted by Caltrans (2020). The *TISG* provides guidance on how Caltrans will review land use projects, with focus on VMT analysis and supporting state land use goals, state planning priorities, and GHG emission reduction goals; as well as identifying land use projects' possible transportation impacts to the State Highway System and potential non-capacity increasing mitigation measures. The *TISG* indicates that Caltrans intends to "transition away from requesting LOS or other vehicle operations analyses of land use projects," instead placing the focus on VMT and safety.

The *TISG* emphasizes that VMT analysis is Caltrans' primary review focus and references the *Technical Advisory* as a basis for the guidance in the *TISG*. Notably, the *TISG* recommends the use of the recommended thresholds in the *Technical Advisory* for land use projects. The *TISG* also references the *Technical Advisory* for screening thresholds that would identify projects and areas presumed to have a less-than-significant transportation impact. Caltrans supports streamlining for projects that meet these screening thresholds because they help achieve VMT reduction and mode shift goals. The *TISG* does not contain any guidance for how to treat truck travel.

Local Development Review (LDR) Safety Review Practitioners Guidance

The *Local Development Review (LDR) Safety Review Practitioners Guidance* (Caltrans, 2024) advises practitioners how to evaluate project-related safety impacts on the state highway system. It stops short of including specific thresholds of significance. The analytical approach described in the guidance focuses on vulnerable road users (i.e., bicyclists and pedestrians) and underserved communities; enhancing safety for pedestrians, bicyclists, transit, and vehicular modes; and applying both reactive and systemic perspectives. Lastly, it reiterates Caltrans supports for shifting away from using delay-based metrics for analysis in CEQA.

The guidance does not offer any suggested practices for evaluating queuing at turn lanes on the state highway system. However, queues that spill out of a left-turn lane on a conventional highway can present similar safety concerns as a freeway off-ramp, for which the document does offer guidance.

Lastly, the guidance identifies the following six challenge areas as high priorities in California as they represent the greatest opportunity to reduce fatalities and severe injuries: lane departures, impaired driving, speed management, pedestrians, bicyclists, and intersections. This topic is analyzed in this report through detailed collision analysis and safety features on the state highway system near the project site.

REGIONAL

Lassen County Regional Transportation Plan

The Lassen County Transportation Commission (LCTC) is the Regional Transportation Planning Agency (RTPA) for Lassen County. LCTC released the Lassen County Regional Transportation Plan (RTP) in November 2023. This document prioritizes and allocates funding for transportation projects within Lassen County. It provides a coordinated, 20-year vision of the regionally significant transportation improvements and policies needed to efficiently move goods and people within the region. The RTP contains the following goals:

- Goal 1: Develop and maintain a comprehensive, efficient, and safe transportation system to serve the needs of County residents and to stimulate the economic progress of the County.
- Goal 2: To provide adequate cost-effective public transit services, especially to accommodate the needs of the elderly and handicapped.
- Goal 3: Promote the continuous flow of goods in, out of, and through the County in a safe and economically efficient manner.
- Goal 4a: Provide an adequate number of safe, efficient airports and airfields.
- Goal 4b: Support the expansion of economical, efficient air services.
- Goal 5: Provide a safe and efficient bicycle and pedestrian circulation system that takes advantage of the natural scenery and physical characteristics of Lassen County.
- Goal 6a: Minimize traffic delays by increasing the efficiency of the existing transportation system through Transportation System Management (TSM) techniques.
- Goal 6b: Where feasible, reduce the demand for travel by Single Occupant Vehicles (SOVs) through Transportation Demand Management (TDM) techniques.
- Goal 7: Reduce GHG emissions from transportation-related activities within the Lassen County boundaries to support the state's efforts under AB-32 and to mitigate the impact of climate change.

Each goal is accompanied by several supporting policies and objectives, which can be found in pages 47-53 of the RTP.

The RTP contains the following planned transportation projects in the project vicinity:

1. SR 36 Complete Streets and Safety Mobility Improvements ($16 million).
2. Susanville Southeast Gateway ($2.5 million).
3. Riverside Drive Bike Path – Class I facility on the south side of Riverside Drive from Fruit Growers Park to the Susan River Trail, crossing Riverside Drive ($2.8 million).
4. Skyline Bike Path Connection to Bizz Johnson Trail – westerly continuation of Class I facility on Skyline Road that terminates at SR 36 to connect with Bizz Johnson Trail ($1.4 million).
5. Riverside Skyline / Bizz Johnson Trail Connection – Class I trail connecting the Riverside Bike Path to the proposed Skyline Extension to the Bizz Johnson Trail ($350,000).

The above projects are described in more detail in Chapter 4 (Cumulative Setting).

Lassen County Active Transportation Plan

The *Final Report for the Lassen County Active Transportation Plan* (2022) [1] describes existing and planned bicycle and pedestrian facilities throughout Lassen County (including within the City of Susanville). It identifies active transportation needs and potential funding sources. The following are the priority projects included in the plan near the project site:

- Skyline Class I Bike Path from Johnstonville Road to the Bizz Johnson Trail – Extension of the existing Class I facility on the old railroad alignment will help to provide parallel capacity to SR 36 for non-motorized uses. The trail would require acquisition of property from the railroad. Recently, the parcel immediately east of the railroad depot was purchased by Lassen Land Trails and Trust.

Lassen County Local Roadway Safety Plan (LRSP)

The Final Report, prepared by LSC in 2022, is available on the county's website. However, it does not present any data or analysis on SR 36 or Skyline Road. Consequently, the LRSP is not referenced any further in this report.

[1] Found at: ENC Cover (lassenctc.com). Accessed on February 18, 2025.

LOCAL

City of Susanville General Plan

In March 2024, the City of Susanville adopted an updated Circulation Element.[2] Relevant goals and policies from this document are described below.

Goal CIR-1 **The City of Susanville shall work with Lassen County and the Lassen County Transportation Commission (LCTC) to develop and maintain a comprehensive, efficient, and safe transportation system to serve the needs of City residents and to stimulate Susanville's economic progress.**

Policy CIR-1.4: Safety. Safety shall be a priority when planning and designing transportation infrastructure improvements in the City of Susanville. All improvements should include industry accepted safety measures for intersections and roadways.

Policy CIR-1.10: Vehicle Miles Travelled (VMT). The City of Susanville shall use VMT rather than Level of Service (LOS) as the SB 375 required metric to measure transportation impacts on the environment for CEQA and other environmental factors and determinations.

Policy CIR-1.11: Complete Streets. Create transportation enhancements in the city that prioritize "complete streets" designs, allowing for easy and safe access for all users, particularly those who prefer or rely on walking, cycling, and transit

Policy CIR-1.14: SR 36 Expressway. Continue to encourage and support the improvement of SR 36 from Susanville to Johnstonville as a four-lane expressway.

Goal CIR-2 **LCTC shall work closely with the City of Susanville and transit providers to provide adequate, cost-effective public transit services.**

Policy CIR-2.5: Route Revisions. Continue to revise routes to reduce travel times, establish more frequent service, and serve more transit activity centers.

Goal CIR-3 **Explore the utilization of Transportation Demand Management (TDM) strategies to reduce dependence on single occupancy vehicles (SOVs) where feasible.**

Policy CIR-3.1: TDM Measures. Encourage measures to reduce vehicle-miles travelled (VMT). Examples include transit incentives, park and ride facilities, and telecommuting facilities.

Policy CIR-3.2: Transit Mode Share. Implement recommendations in regional transit plans to increase the mode share of public transit in the City of Susanville.

[2] SUSGP_Final_Circulation_Element_Update.pdf

Goal CIR-4 Provide a safe and efficient multimodal network within and surrounding the City of Susanville.

Policy CIR-4.1: Micro-transit. Provide more coverage to areas without a fixed route service using micro-transit.

Policy CIR-4.2: Transportation Network Companies (TNCs). Encourage TNCs such as Uber and Lyft, to provide a reliable number of vehicles in the Susanville area.

Goal CIR-5 Explore and encourage alternative forms of more efficiently providing public transportation to the residents or visitors of Susanville.

Policy CIR-5.1: Enhancing Safety. Develop a bikeway system that enhances the safety and convenience of bicycling or walking to work or school. This should include making improvements to crossing protections at major intersections.

Policy CIR-5.2: Universal Design. Require pedestrian facilities to be ADA compliant and accessible for people of all abilities.

Goal CIR-6 Include bikeway facilities in all appropriate future development projects to facilitate on-site circulation for bicycle travel, on-site bicycle parking, and connections to the proposed system.

Policy CIR-6.3: Bicycle Facilities. Support provision of parking, shelters, and off-street facilities, where feasible and practical, to promote bicycle and pedestrian travel. Require future developments that might experience a high bicycle demand, such as commercial areas, parks, libraries, and schools, to support these facilities.

Goal CIR-7 Improve pedestrian networks and amenities to create more safe and walkable neighborhoods.

Policy CIR-7.3: Street Lighting. Enhance street lighting, as necessary, to provide better pedestrian safety.

Policy CIR-7.4: Pedestrian Crossings. Enhance the safety of local intersections by pursuing signage and overhead pedestrian crossing especially along Main Street.

Background information contained in the updated *City of Susanville Circulation Element* (2024) is utilized in this study. This includes certain Vehicle Miles of Travel (VMT) metrics, which are described in more detail later.

2. ENVIRONMENTAL (EXISTING) SETTING

This chapter describes the existing transportation system including the roadway, bicycle, pedestrian, and transit facilities in the project vicinity.

Roadway System

This section is divided into the following six topical areas:

- Existing Roadways
- Truck Routes
- Existing Traffic Volumes
- SR 36/Skyline Road Intersection Geometrics and Signal Operations
- Vehicle Queuing
- SR 36 Study Area Safety Features and Collision History

Existing Roadways

The roadway system in the project vicinity consists of State Route 36, and several city/county streets. **Figure 3** displays the functional classification and number of lanes on roadways in the project vicinity. This figure is derived from the Lassen County General Plan and public review draft City of Susanville General Plan circulation maps. Key roadways in the study area include the following:

- **State Route (SR) 36/Main Street**[3]: SR 36 is the only road in Susanville that has a principal arterial functional classification and acts as the city's main street through downtown. The following describes the various cross-sections of SR 36 within the study area:
    - SR 36 (north of Riverside Drive): four-lane median divided highway featuring a two-way left-turn lane (TWLTL).
    - SR 36 from Riverside Drive to Skyline Road: narrows immediately south of Riverside Drive from four lanes to a two-lane undivided highway with passing prohibited.
    - SR 36 south of Skyline Road: two-lane undivided highway that includes a 1.7-mile section where passing is permitted.

[3] For purposes of this report, segments and turn movements along SR 36 in the project vicinity are described as being northbound or southbound based on the highway's actual geographic orientation near the project site. This is in contrast to its designation as an east-west highway (by virtue of Caltrans state highway numbering conventions).

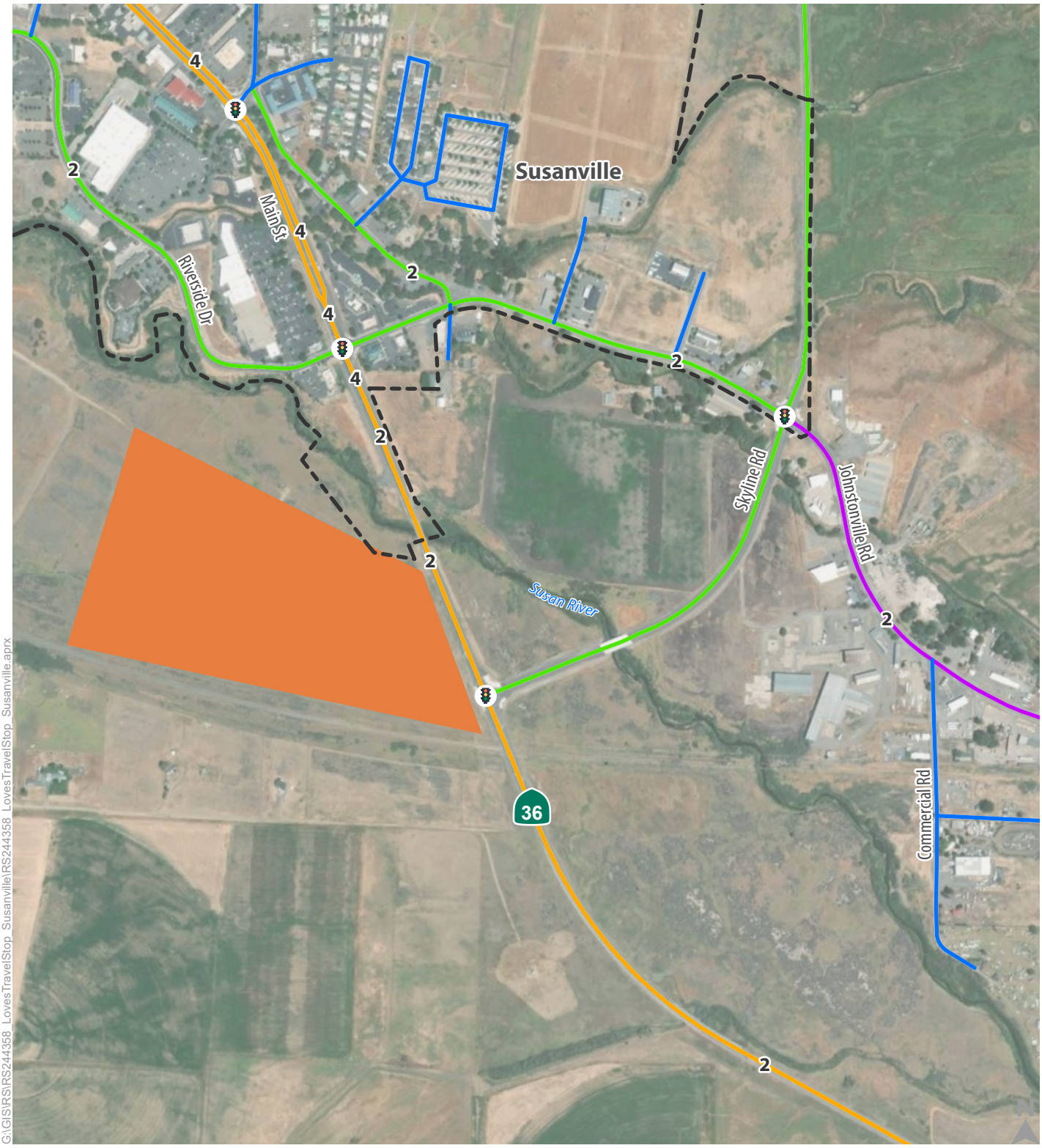


Figure 3

Existing Roadway Network

The posted speed limit on northbound SR 36 gradually tapers approaching downtown Susanville. Just north of US 395 in Johnstonville, the roadway has a posted speed limit of 55 miles per hour (mph). The speed limit drops to 50 mph just south of Skyline Road and drops to 40 mph approaching Riverside Drive. The posted speed limit north of Riverside Drive (within downtown Susanville) is 30 mph. In the southbound direction departing Susanville, the posted speed limit increases to 50 mph south of Riverside Drive and then increases to 55 mph south of Skyline Road.

- **SR 139 (Ash Street)**: begins at SR 36 where it is known as Ash Street. It extends northerly as a two-lane undivided road through Susanville and into unincorporated Lassen County. It connects the City of Susanville to the City of Alturas and other rural communities to the north. SR 139 has a minor arterial functional classification.
- **Skyline Road** is classified as a two-lane minor arterial. It begins at SR 36 and extends in a northeasterly direction for 2.5 miles to SR 139. It continues beyond SR 139 for 1.3 miles, terminating at Paiute Lane. Skyline Road provides access to residential areas in the north and east areas of the city along with Lassen Community College situated on SR 139. Its only posted speed limit is a 55 mph sign situated in the southbound direction south of SR 139. The connection of Skyline Road to SR 36 was completed and opened to traffic in late 2020 / early 2021.
- **Riverside Drive** extends 1.8 miles in a northwestern direction from SR 36 at the south edge of Downtown Susanville, terminating at Richmond Road. It is an important city street, providing access to various retail and office uses, Susan River recreational sites, residential areas, the Lassen County Government Center, Lassen County Superior Court, and Bureau of Land Management offices. It also extends east of SR 36 for 600 feet where it becomes Johnstonville Road. It is classified as a two-lane minor arterial with posted speed limits of 25 or 30 mph depending on the segment.

Susanville sits at an elevation of 4,186 feet. On average, it receives snowfall about 53 days per year with total accumulation of 43 inches[4]. This suggests that large accumulations over a single day do not typically occur. Through internet literature searches, it is apparent that mandatory four-wheel drive or chain controls are in effect along certain parts of SR 36 during adverse weather events. No signage is present in the project vicinity indicating that chain controls are implemented during adverse weather conditions. However, a sign is present stating "Watch for Snow Removal Equipment".

[4] Source: Yearly & Monthly weather - Susanville, CA (weather-us.com). Accessed on August 5, 2024.

Truck Routes

Caltrans website[5] shows that State Routes 36 and 44 in Lassen, Shasta, and Plumas counties are STAA terminal access routes, as is US Highway 395 in Lassen County. The 10-mile segment of SR 36 between SR 44 (west of Susanville) to US Highway 395 (east of Susanville) is an important truck route corridor. It is the preferred route that long-distance trucks use to travel between Reno and Redding. It also allows trucks to access local cities/communities such as Susanville, Johnstonville, Westwood, and Chester.

SR 139 north of SR 36 is a 65-foot California Legal Truck Route with a 30-foot KPRA (i.e., maximum distance from kingpin to rear axle). There are no restrictions on the use of Skyline Road by trucks, though it is not posted as a STAA route.

Existing Traffic Volumes

Caltrans website[6] reports the estimated Average Annual Daily Traffic (AADT) volume and peak month ADT volume at locations throughout the state highway system. According to Caltrans, most locations are not counted each year, and "the resulting counts are adjusted to an estimate of the AADT by compensating for seasonal influence, weekly variation, and other variables which may be present".

Table 1 displays the Caltrans' reported Average Annual Daily Traffic (AADT) and peak month ADT, and peak hour volume of peak month on SR 36 between Riverside Avenue and Skyline Road for the six-year period from 2017 through 2022, inclusive. Note that 2022 is the most recent year that data is available on the Caltrans website as of this report date.

[5] Source: truckmap-d02 - draft (ca.gov). Accessed on July 9, 2024.

[6] Found at: Traffic Census Program | Caltrans. Accessed on July 9, 2024.

Table 1: 2017-2022 Traffic Volumes on SR 36 between Riverside Drive and Skyline Road			
Year	**Average Annual Daily Traffic (AADT)**	**Peak Month**	
		Average Daily Traffic (ADT)	**Peak Hour Volume**
2017	16,700	17,800	1,800
2018	16,000	17,000	1,700
2019	15,600	16,200	1,600
2020	14,000	15,000	1,550
2021	14,500	16,000	1,600
2022	14,400	15,000	1,600

Source: Caltrans, 2024. Traffic Census Program | Caltrans

Key findings from this table are:

- While traffic volumes on SR 36 south of downtown Susanville appear to have been steadily decreasing since 2017, there are several unique factors that likely contributed to this including:
  - The large drop in 2020 is likely attributable to the peak of the COVID-19 pandemic, during which major decreases in travel were observed nationwide.
  - Although not known if explicitly considered in the Caltrans data, the multi-county Dixie Fire in Summer 2021 likely contributed to overall lower average annual totals. During this time, Lassen National Park (situated 80 miles northeast of Susanville) was closed as were various campgrounds and other recreational sites.
  - The completion of the Skyline Road connection in 2020/2021 shifted some traffic away from SR 36 through downtown Susanville. Caltrans data shows the volume on SR 139 east of SR 36 decreased from 5,900 AADT in 2018 to 5,400 AADT in 2022, suggesting the counts are sensitive to this new connection.

As an additional check of the reasonableness of the data in Table 1, the Caltrans PeMS (Performance Measurement System) [7] database was reviewed to determine if any recent counts along SR 36 are available. This system reports hourly traffic volumes from in-pavement detectors located throughout the state highway system. A functional detector was found on SR 36 between Riverside Drive and SR 139 (i.e., in downtown). Unfortunately, only a limited amount of data from May and August 2019 was available. The data revealed the following mid-week averages:

[7] Source: Caltrans PeMS, Accessed on July 10, 2024.

- Early/mid-May 2019 (average of three days of counts): 16,800 ADT and 1,380 peak hour volume
- Mid/late-August 2019 (average of three days of counts): 16,500 ADT and 1,390 peak hour volume[8]

The Caltrans 2019 data from its website for this segment, which is not the same segment whose data is shown in Table 1, shows 16,200 peak month ADT and 1,500 peak hour volume. This suggests these two independent sources of data yield consistent findings, further validating the volumes in Table 1.

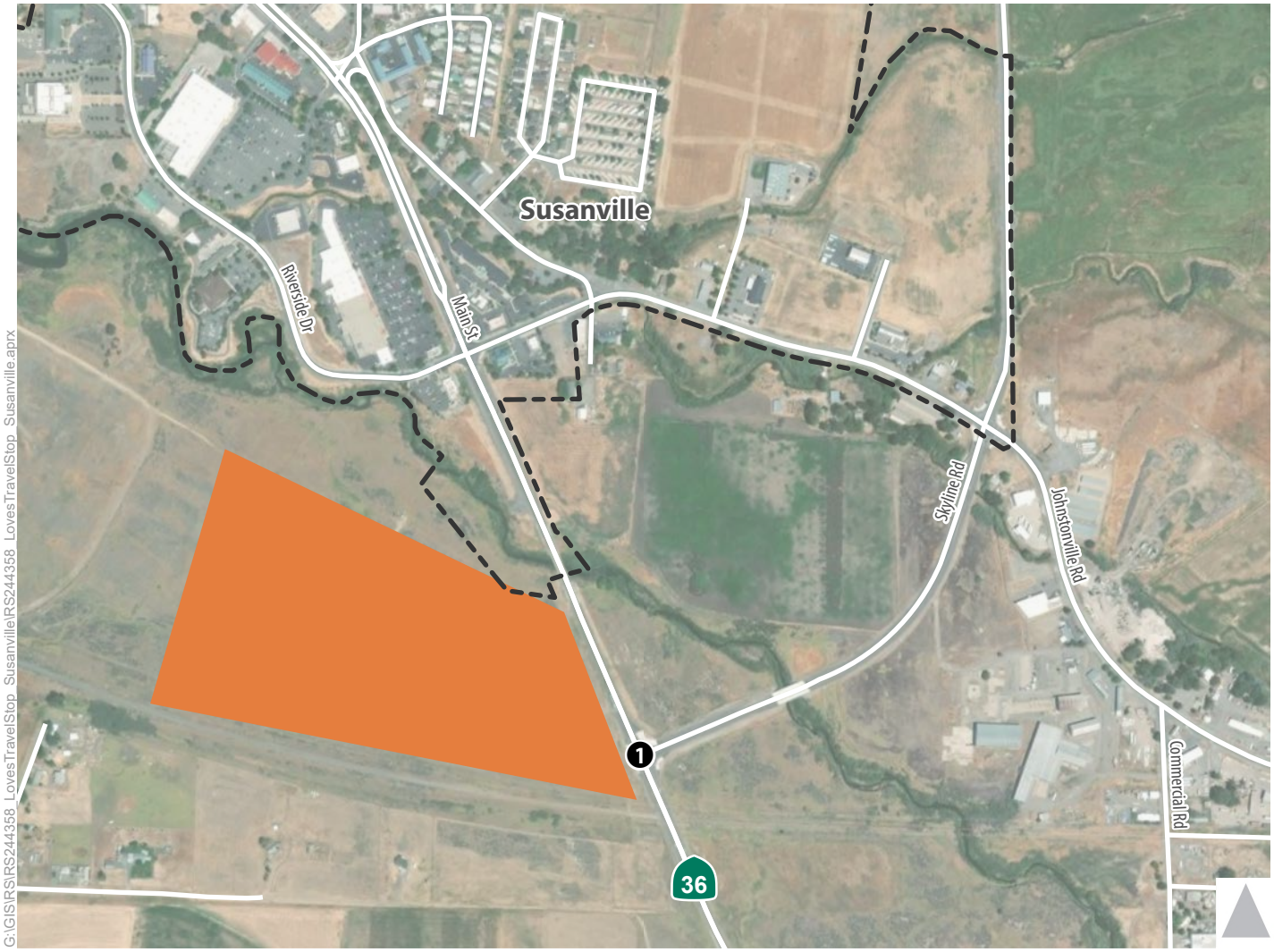
Fehr & Peers retained National Data Services (NDS) to conduct traffic counts at the SR 36/Skyline Road intersection on Wednesday, May 29, 2024, during the weekday AM (7 – 9 AM) and PM (3 – 6 PM) peak periods. At the time of the counts, schools within the Susanville School District were still in session (last day was June 6th). However, Lassen Community College (enrollment of about 1,600 students) was already out of session and had not yet begun summer school. To overcome the challenge of the traffic counts not reflecting college traffic, data was purchased from StreetLight, Inc. This company uses anonymous mobile device data to estimate traffic conditions. The acquired dataset was from mid-weekdays in Spring 2023 when schools were in session.

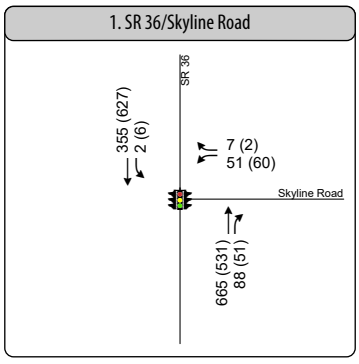
In addition, peak hour traffic data from the *SR 36 Complete Street and Safe Mobility Report* (Mark Thomas, 2020) was obtained for the SR 36/Riverside Drive intersection. For that study, counts were collected in January 2019 and factored up by its authors to reflect peak weekday conditions. Fehr & Peers used the factored-up data to establish the amount of AM and PM peak hour traffic in each direction of SR 36 south of Riverside Drive. Because those volumes reflected a condition prior to Skyline Road connecting to SR 36, an additional step was needed to reflect some trips being rerouted to Skyline Road. Those redirected volumes were based on the Streetlight data from 2023.

The resulting weekday AM and PM peak hour volumes used for subsequent analyses in the study are shown on **Figure 4**. The AM peak hour occurred from 7:30 to 8:30 AM and the PM peak hour occurred from 5 to 6 PM. Traffic volumes within each peak hour were consistent across each 15-minute interval, with peak hour factors (PHFs)[9] of 0.95 observed.

[8] These two data points result in a measured, average k-factor (ratio of daily to peak hour traffic) of 8.3%. This value is used later in this chapter to estimate the ADT on the study segments of SR 36.

[9] The peak hour factor (PHF) measures the degree of variation in traffic within the peak hour. A PHF of 1.0 indicates no variation. The lower the PHF, the more variation occurs. Because the PHF is applied in traffic operations analyses, the reported results are representing the busiest 15-minutes of the peak hour.





Turn Lane
AM (PM) Peak Hour Traffic Volume
Traffic Signal
Study Intersection
Project Site
Susanville City Limit

Figure 4

Weekday AM and PM Traffic Volumes and Lane Configurations - Existing Conditions

Truck Traffic

The *Highway Capacity Manual* (Transportation Research Board, 2022) defines a truck as all vehicles with three or more axles and vehicles with two axles and dual tires on the rear axle. Caltrans website distinguishes between regular two-axle vehicles and two-axle trucks. Traffic data from this website that trucks represented 9.0% of the 2022 AADT on SR 36 between Skyline Road and Riverside Drive. Similar to the AADT estimates, these are estimated values and not verified values. However, a pair of verified counts (from the PeMS database) in 2016 and 2019 on US Highway 395 both north and south of its junction with SR 36 revealed 10% and 12.5% trucks, respectively. A Caltrans study (SR 36 Capital Preventative Maintenance project) completed in 2016 assumed 8% trucks for traffic forecasting and analysis purposes. The same 8% trucks assumption was also used in the *SR 36 Complete Street and Safe Mobility Report*.

The May 2024 traffic counts by NDS at the SR 36/Skyline Road intersection separately tracked trucks, recreational vehicles (RVs), bicyclists, and pedestrians passing through the intersection. **Table 2** displays the percentage of vehicular travel consisting of trucks and RVs for each turning movement during each peak hour.

Table 2:
Percent Trucks and RVs by Movement at SR 36/Skyline Road Intersection – Existing Conditions

Movement	AM Peak Hour		PM Peak Hour	
	Trucks	RVs	Trucks	RVs
SR 36 NB TH	3.9%	0%	3.9%	0.6%
SR 36 NB RT	2.5%	0%	7.8%	0%
SR 36 SB LT	0%	0%	0%	0%
SR 36 SB TH	7.7%	0%	5.1%	0%
Skyline Road WB LT	11.8%	0%	6.6%	0%
Skyline Road WB RT	0%	0%	0%	0%
Total	5.5%	0%	4.8%	0.2%

Notes:
1. Based on turning movement counts collected on Wednesday, May 29, 2024.
2. Refer to above text for definition of trucks.

Source: Fehr & Peers, 2025.

This table indicates that trucks were about 4% of all vehicles for the northbound through movement, and 5% for the AM peak hour and 8% for the PM peak hour of vehicles for the southbound through movement. It is typical for truck percentages to be lower during peak hours as the result of commute traffic added to those periods and trucking operations not necessarily coinciding within a typical 8 AM to 5 PM timeframe.

Table 3 shows the traffic stream composition on SR 36 at Skyline Road including the absolute numbers of total vehicles, trucks, and RVs. These values are derived from the various traffic data sources discussed previously. They represent Year 2024 conditions with schools in session. Note that trucks are in the 4% to 8% range on SR 36 during peak hours, and 8% of all traffic on a daily basis.

Table 3:
Traffic Stream Composition on SR 36 and Skyline Road Adjacent to Project Site – Existing Conditions

Roadway and Direction of Travel	Segment	Weekday			AM Peak Hour (7:30 – 8:30)			PM Peak Hour (5:00 – 6:00)		
		Total Vehicles [1]	Trucks [2]	RVs [3]	Total Vehicles [1]	Trucks [2]	RVs [3]	Total Vehicles [1]	Trucks [2]	RVs [3]
Northbound on SR 36	North of Skyline Road	Daily Traffic by Direction Not Applicable			672	26	0	533	21	3
	South of Skyline Road				753	28	0	582	25	3
Southbound on SR 36	North of Skyline Road				357	27	0	633	32	0
	South of Skyline Road				406	33	0	687	36	0
Total on SR 36	North of Skyline Road	14,000	1,120	42	1,029	53	0	1,166	53	3
	South of Skyline Road	15,300	1,220	46	1,159	61	0	1,269	61	3
Eastbound on Skyline Road	East of SR 36	Daily Traffic by Direction Not Applicable			90	2	0	57	4	0
Westbound on Skyline Road	East of SR 36				58	6	0	62	4	0
Total on Skyline Road	East of SR 36	1,800	100	4	148	8	0	119	8	0

Notes:
1. Daily total volumes rounded to the nearest one hundred vehicles. ADT on SR 36 and Skyline Road based on 8.3% k-factor (see prior page for its derivation).
2. Daily truck volumes rounded to the nearest 10 vehicles. Trucks represent 8% of all traffic on a daily basis per Caltrans data.
3. RVs assumed to represent 0.03% of all traffic on a daily basis based on five-hours of counts on Wednesday, May 26, 2024 that showed this proportion.

Source: Fehr & Peers, 2025.

SR 36/Skyline Road Intersection Geometrics and Signal Operations

The SR 36/Skyline Road intersection is controlled by a traffic signal. Signal operation features consist of the following:

- Actuated, uncoordinated operations (i.e., light turns green when vehicle is detected).
- Southbound left-turn protected phasing (i.e., left-turn movement is given a green arrow, meaning it is protected).
- Northbound right-turn has an overlap arrow (i.e., right-turn arrow is green simultaneously with the westbound left-turn movement).

Images 1-3 below show the view of the signalized intersection looking toward the north, south, and west, respectively. Images 1 and 2 show a wide shoulder (about 8 feet) present on the west side of SR 36, with a narrower (about 4 feet) shoulder on the east side.

Details about the signal's pedestrian and bicycle features as well as safety features are presented later in this chapter.



Image 1: View looking north on SR 36 toward signal at Skyline Road.



Image 2: View looking south on SR 36 toward signal



Image 3: View looking west on Skyline Road toward signal

Vehicle Queuing

Vehicle queuing is analyzed at the SR 36/Skyline Road study intersection to determine whether turn pocket storage is currently adequate and whether it could potentially be exceeded by the addition of project trips.

Traffic volumes, lane configurations, vehicle fleet mix, traffic controls, signal timings, and other inputs were entered into a Simtraffic microsimulation model, which then reports the 95th percentile queues for all intersection movements. The 95th percentile queue represents a length of queued traffic for which there is a 5% or less probability that the actual queue would be greater. Because trucks represent a significant portion of the vehicle fleet mix in the project vicinity, the proportion of trucks and their average lengths were explicitly entered into the model. This methodology is consistent with procedures described in the latest edition of the *Highway Capacity Manual*. To facilitate direct comparisons between scenarios, the precise (non-rounded) 95th percentile queue (in feet) is reported. Consistent with standard practice, SimTraffic analysis results are the average of 10 SimTraffic runs.

Table 4 shows the 95th percentile queue lengths estimated at the study intersection. As shown, the 95th percentile queues do not exceed the available turn lane storage at each location. Refer to **Appendix A** for technical calculations.

Table 4:
95th Percentile Vehicle Queues at the SR 36/Skyline Road Intersection – Existing Conditions

Direction	Movement	Available Storage[2]	95th Percentile Queue (feet)[1]	
			AM Peak Hour	PM Peak Hour
Northbound	Through	2.4 mile	165	134
	Right-Turn	500 feet	40	31
Southbound	Left-Turn	310 feet	12	23
	Through	2,100 feet	108	139
Westbound	Left-Turn	275 feet	69	63
	Right-Turn	2,400 feet	17	8

Notes:
1. 95th percentile queue based on output from SimTraffic model.
2. Storage measured based on aerial imagery using length of turn pocket or distance to upstream intersection for through movements.
Source: Fehr & Peers, 2025.

SR 36 Study Area Safety Features and Collision History

The following safety elements are present approaching and departing the SR 36/Skyline Road intersection:

1. **The northbound direction of SR 36 south of Skyline Road has Signal Ahead pavement markings, and a Signal Ahead (W3-3) sign with an attached flashing warning beacon.** Page 273 of the *California Manual of Uniform Traffic Control Devices* (CA MUTCD) (Caltrans, 2014) indicates the following with respect to the placement of this sign:

   > *"These signs shall be installed on an approach to a primary traffic control device that is not visible for a sufficient distance to permit the road user to respond to the device (see Table 2C-4). The visibility criteria for a traffic control signal shall be based on having a continuous view of at least two signal faces for the distance specified in Table 4D-2."*

   The sign is situated on the right side of the roadway about 1,000 feet south of the intersection along a segment of SR 36 with gradual horizontal curvature. Review of Google maps aerial imagery indicates that two signal heads are visible from this location. Nevertheless, the placement of this sign and the pavement markings provides additional advanced driver warning information. A Signal Ahead sign is not situated on southbound SR 36 approaching Skyline Road as the roadway is straight.

2. **All signal heads at the SR 36/Skyline Road intersection have backplates framed with a retroreflective border.** Backplates added to traffic signal heads improve the visibility of the illuminated face of the signal by introducing a contrasting background, both in daytime and nighttime conditions. The FHWA *Proven Safety Countermeasures Initiative* estimates that this countermeasure reduces collisions affected by this signal head visibility by 15%.[10]

3. **The northbound and southbound through motorists on SR 36 at Skyline Road encounter a innovative type of signal head, in which there are a pair of closely spaced red ball signal indications.** Below the pair of red signal indications are single yellow and green indications. This same treatment is present on SR 36 at Riverside Drive and US 395/Richmond Road.

4. **The yellow and all red signal timings are set in consideration of travel speeds on SR 36.** According to the signal timing plans provided by Caltrans, the SR 36 approaches have 5.5 and 5.9 second yellow clearance intervals. These clearance intervals are based on the prevailing speeds on SR 36. Additionally, a 1-second all red interval is also provided on the SR 36 approaches, thereby adding an additional safety factor against collisions involving red light running.

5. **Intersection lighting (via luminaires atop signal poles) is provided in the northwest, southwest, and southeast corners of the intersection.**

[10] Source: Backplates with Retroreflective Borders | FHWA (dot.gov). Accessed August 5, 2024.

6. **Edge of roadway treatments are present on the recently reconstructed west side of SR 36 (to support the new traffic signal) that are more tapered versus a vertical drop-off at the pavement edge.** This practice is known to have less severe outcomes associated with vehicles leaving the roadway and is included in the FHWA countermeasures list.

Advisory Warning Signs

A Pedestrian Crossing (W11-2) sign is located on northbound SR 36 between Skyline Road and Riverside Drive. This sign has been present at this location since at least 2007 (according to Google maps). According to the CA MUTCD, these signs "may be used to alert road users in advance of locations where unexpected entries into the roadway might occur or where there is shared use of the roadway by pedestrians." Its presence predates the "Welcome to Susanville" sign adjacent to it that may attract occasional stops along the roadway to take photos. It is possible that SR 36 experiences occasional pedestrians walking along the highway.

Collision History

The collision history of the SR 36 corridor in the vicinity of Skyline Road was documented using the Transportation Injury Mapping System (TIMS) database. This is a free and publicly available dataset of reported injury collisions on local and state roadways. TIMS data was for the 7.5-year period from January 1, 2017 through June 30, 2024. This dataset provides numerous variables associated with each collision including time of day, day of week, date, primary collision factor, collision type, number of involved parties, collision severity, weather conditions, lighting, pavement conditions, involvement of bicyclist, pedestrian, or motorcycle, driver impaired, driver age and gender. The TIMS data also includes the latitude and longitude of each collision, allowing for spatial analysis of the data. The TIMS database classifies collisions as either fatal, severe, or injury-only. Key findings from this dataset are:

- Since its construction in late 2020/early 2021 through June 2024, the SR 36/Skyline Road intersection experienced one reported injury collision. This crash occurred in February 2024 about 300 feet south of the intersection. It was a rear-end collision between two northbound vehicles, resulting in a minor injury. Weather conditions were cloudy, and the primary collision factor (PCF) was unsafe speed.
- The SR 36/Riverside Drive and SR 36/US 395/Richmond Road intersections experienced two and four injury collisions, respectively, during this time period. Two mid-segment collisions were reported between Skyline Road and US 395.
- None of the seven collisions listed above involved a vulnerable roadway user (i.e. bicyclist or pedestrian). Additionally, none involved a truck.

Bicycle and Pedestrian System

Image 4 shows the following two types of bicycle facilities located in the project vicinity.

Class I bicycle paths or multi-use paths are located off-street and typically permit use by both bicyclists and pedestrians.

Class II bicycle facilities are commonly known as "Bike Lanes" which share the roadway with motorized vehicles, typically following the same direction as automobile traffic. Class II facilities use striped marking that acts as a buffer from adjacent motorized traffic lanes. To comply with Caltrans' requirements, a Class II facility should be at a minimum 4 feet wide.



Image 4: Illustration of Class I and II bicycle facilities

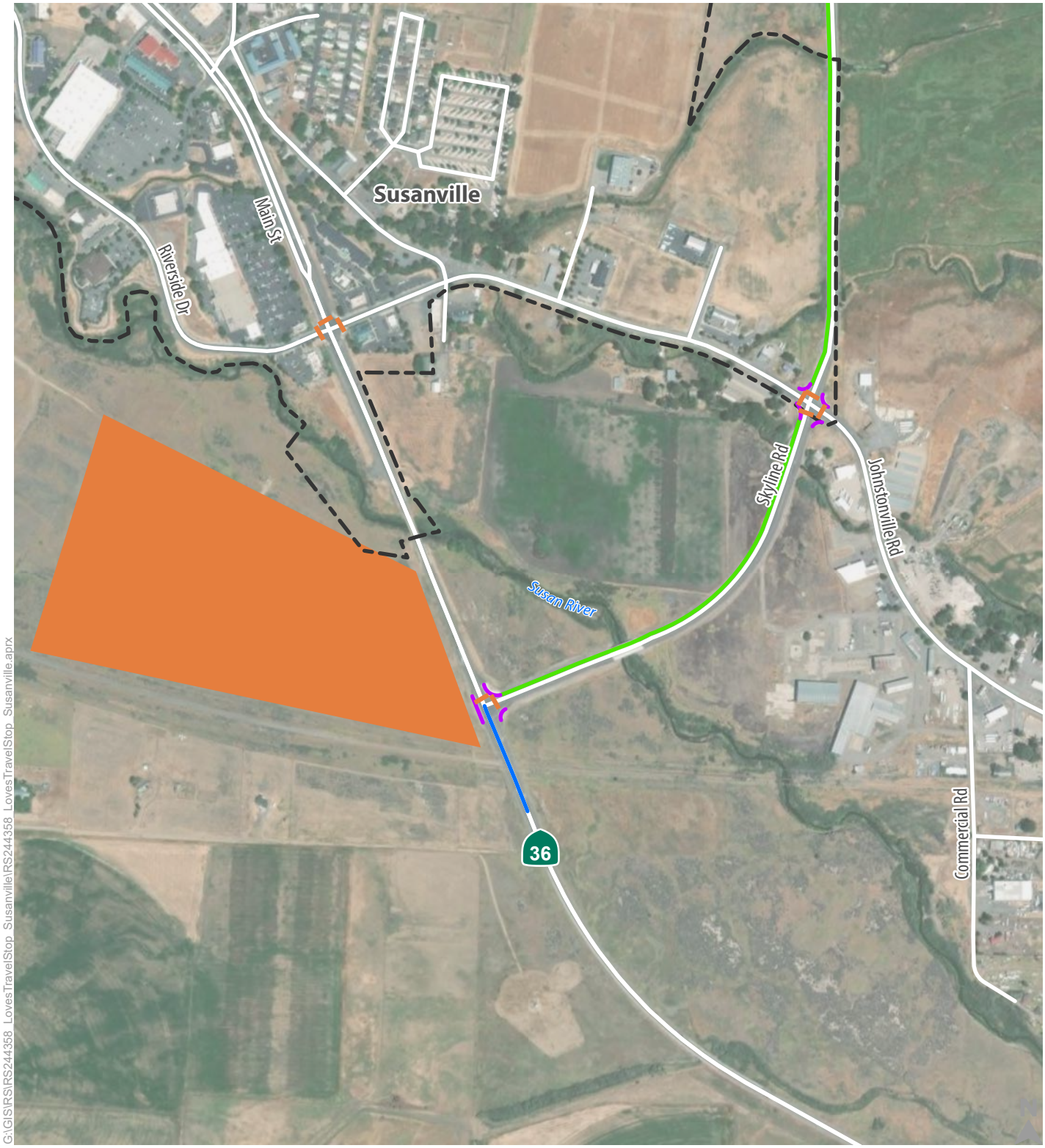
The following bicycle facilities are present in the project vicinity (see **Figure 5**):

- Skyline Road Class I Multi-Use Path – This off-street path runs along the north/west side of Skyline Road between SR 36 and SR 139. Along the pathway, several "Bike Lane" signs are erected. However, because it is physically separated from the roadway, it is not actually a Class II bike lane.
- Class II Bike Lane on Northbound SR 36 – a 500-foot Class II bike lane is striped between the through and right-turn lanes. It consists of pavement markings, but no signage. The bike lane does not exist leading up to or beyond the intersection. This bike lane is shown on **Image 5**.

Other notable trails in the area (though outside the immediate project vicinity) include the Susan River Trail and the Bizz Johnson National Recreation Trail, the latter of which is discussed in more detail in Chapter 4 (Cumulative Conditions).

There is a "Share the Road" sign on southbound SR 36 south of Riverside Drive. No such signs are present elsewhere in the SR 36 study corridor.

Bicycle and pedestrian travel were recorded as part of the intersection counts. No pedestrians and one bicyclist (traveling northbound on SR 36) were observed during the five-hour count period at the SR 36/Skyline Road intersection. During a field visit in July 2024, a bicyclist was observed riding northbound on SR 36 between Johnstonville and Skyline Road (see **Image 6**).



Project Site
Susanville City Limit
Crosswalks
Sidewalks
Class II bike Lane (NB Only)
Class I Multi-Use Path

* = Much of SR 36 has shoulders of sufficient width to allow bicycling. However, it is not designated as a bike lane by any signage or pavement markings.

Figure 5

Note: Facilities shown are limited to SR 36 from Riverside Dr. to south limits of map and Skyline to north limits of the map.

Existing Pedestrian and Bicycle Facilities



Image 5: Class II bike lane on northbound SR 36 approaching Skyline Road



Image 6: Bicyclist on northbound SR 36 south of Skyline Road

In summary, parts (but not all) of this segment of SR 36 have shoulder widths suitable for biking, but lack any designated signs. This approach is likely necessitated by the presence of farm equipment that uses the shoulder to travel between fields (see Image 3 for example). When such circumstances are present, Class II bike lanes are typically not striped because the agricultural vehicle is not permitted to travel extended distances within them.

Pedestrian facilities in the immediate project vicinity include crosswalks on the north and east legs of the SR 36/Skyline Road intersection. Both crosswalks feature pedestrian push button activation, pedestrian countdown heads (i.e., seconds remaining in Flashing Don't Walk phase are shown), and an accessible pedestrian signal, which provides audible guidance such as, "Walk Sign is on to Cross Skyline Road". ADA ramps with truncated domes are present at each crosswalk start/end point. Crosswalks are also present at the SR 36/Riverside Drive and Skyline Road/Johnstonville Road signalized intersections. Field observations showed usage of the Class I Skyline multi-use path by pedestrians.

Transit System

The Lassen Transit Service Agency (LTSA) provides public transportation services in Lassen County. LTSA operates the Lassen Rural Bus System for local and inter-community routes. LTSA also has agreements with Lassen Senior Services and Big Valley 50 Plus to serve senior transportation needs. Other services in Lassen County includes paratransit / dial-a-ride services.

The nearest bus stop to the project site is located within the Safeway Shopping Center situated in the northwest quadrant of the SR 36/Riverside Drive intersection. The Susanville City Route and the West County route both stop at this location. Each route is described briefly below:

- The Susanville City Route is a looped route with the Safeway stop being the most southerly location. The route services various schools, governmental, residential, and commercial areas within city limits with 46 stops along the route. It operates on one-hour headways on weekdays with stops each hour 8 AM to 7 PM.[11]
- The Susanville City Express Route is a circular line with 19 stops departing from Lassen Community College. It operates from 10:30 AM to 3 PM on weekdays and stops at the Safeway Shopping Center.
- The West County Deviated Fixed Route provides three round trips per day on weekdays between Susanville and communities to the west. Passengers may flag down the bus along the route. Within the Walmart parking lot a short distance further north, South County Commuter Route has a stop.

It is about a ½ mile walk or bike ride to reach the project site from the nearest transit stop.

[11] Source: Layout 1 (lassentransportation.com). Accessed on August 2, 2024.

3. PROJECT TRAVEL CHARACTERISTICS

This chapter first presents the proposed project's land uses and expected travel characteristics. It then discusses how the project would affect vehicle queuing at the SR 36/Skyline Road intersection. Finally, it displays the project's VMT generation.

Project Description

Figure 2 shows the project site plan. Its trip generating land uses consist of the following:

- 4 truck fueling lanes/positions and 70 truck parking spaces
- 12 vehicle (auto) fueling pump positions
- 7,943 sq. ft. convenience store
- 3,474 sq. ft. fast-food restaurant with drive-through window
- 1,588 sq. ft. fast-food restaurant without drive-through window
- 10 overnight RV parking spaces

Access to the project site would be provided by the extension of Skyline Road (with one lane in each direction separated by a two-way left-turn lane) west of SR 36. A pair of driveways would be constructed on the north side of this extension to serve the project. Each driveway is described in detail below:

- Driveway A – would be situated about 485 feet west of Driveway B and provide access to the truck fueling islands and parking. The driveway would be 60 feet wide with 50-foot curb return radii. Skyline Road would terminate 50 feet west of this driveway, which would serve almost exclusively trucks.
- Driveway B – would be situated 610 feet west of SR 36 and provide access to the auto fuel pumps, convenience market, fast-food restaurants, and RV parking. The driveway would be 40 feet wide with 30-foot curb return radii. The convenience market and fast-food restaurants would also be accessible (by walking) from the truck area.

SR 36/Skyline Road Intersection Improvements

According to plans provided by the project's civil engineer, the proposed project includes construction of the following travel lanes on SR 36 at Skyline Road:

- 300-foot northbound left-turn lane on SR 36; and
- 250-foot southbound right-turn lane on SR 36.

Two sets of lane configurations, traffic signal phasing plans, and crosswalk treatments are analyzed on the Skyline Road approaches to SR 36. They are:

- **Alternative 1:**
  - New Eastbound Approach: consists of one left-turn lane and one shared through/right lane.
  - Existing Skyline Road Westbound Approach: is modified to consist of a left/through lane and an exclusive right-turn lane.
  - Signal Phasing: Due to the westbound shared left/through lane, the east-west approaches would necessarily operate with split phasing.
  - Crosswalk Treatments: Crosswalks would be added to the west leg and north leg (across SR 36) but would not be added to the south leg due to potentially inefficient signal operations (i.e., increased SR 36 queuing caused by successive pedestrian Walk signal phases across each crosswalk across SR 36).

- **Alternative 2:**
  - New Eastbound Approach: consists of one left-turn lane and one shared through/right lane.
  - Existing Skyline Road Westbound Approach: is modified to consist of one left-turn lane and one shared through/right lane.
  - Signal Phasing: the east-west approaches would operate with protected left-turn phasing.
  - Crosswalk Treatments: Crosswalks would be added to the west leg, north leg, and south leg.

Caltrans has not expressed a preference of one geometric/signal phasing alternative over the other. But how the adjacent signal intersections along SR 36 near the study intersection operate may be an indication. The SR 36/Riverside Drive intersection operates with split phasing on the side-streets despite protected left-turns being provided. The same is true for the SR 36/US 395/Richmond Road intersection to the south.

Despite what could appear to be Caltrans' preference for Alternative 1, both alternatives are analyzed here in an equal level of detail.

Project Travel Characteristics

This section presents the project's expected trip generation and distribution/assignment characteristics.

Project Trip Generation

When transportation professionals are tasked with analyzing the expected number of vehicle trips generated by a proposed land use, the *Trip Generation Manual (TGM), 11th Edition* (Institute of Transportation Engineers, 2021) is typically the first resource considered. With regard to the proposed project, the TGM contains the following potentially applicable land use categories including:

- LUC 945: Convenience Store/Gas Station
- LUC 950: Truck Stop
- LUC 416: Campground / RV Park
- LUC 934: Fast Food Restaurant with and without Drive-Through Window

The proposed project has land use components that are represented by each of the above uses. Review of the TGM data shows there to be both strengths and weaknesses when considering use of these land use categories, as described below:

- LUC 945: Convenience Store/Gas Station – there are numerous sampled sites and both the number of vehicle fueling positions (VFP) and convenience store size is considered. This land use category is frequently used to estimate project trips.
- LUC 950: Truck Stop – Only 4 data points for AM peak hour, 7 for PM peak hour, and 2 for daily conditions are provided. The trip rate is expressed only as number of trucks generated per vehicle fueling position. The *TGM* issues a caution that the trip rates are quite high given amount of time required by a truck to fuel up. Additionally, it is unclear what other uses, besides truck fueling, were present at the sampled sites. This land use category is not often used to estimate project trips given this uncertainty and small sample size.
- LUC 416: Campground / RV Park – this land use category represents a traditional campground based on the dependent variable being the number of occupied campsites. The AM peak hour has 4 data points, PM peak hour has 5 data points, and there are no daily data points. This category is poorly suited to analyze the RV trip generation component of the proposed project.
- LUC 934: Fast Food Restaurant with and without Drive-Through Window – this land use has numerous data points and is used routinely in impact studies.

In addition to the above limitations, other questions pertain to the extent to which internal-trip making occurs between complementary land uses (e.g., visit fast-food restaurant after filling up vehicle). Additionally, other variables that could affect trip generation are not considered in the above categories, such as the amount of adjacent street truck traffic. Had the above ITE land use categories and trip rates been applied without any adjustments for internal trip making, the project would have generated approximately 530 auto trips and 60 truck trips during the PM peak hour.

The consulting firm of GHD collected traffic data at six different Love's Travel Stops situated in the California Central Valley and Southern California in November 2017. This was supplemented by an additional Love's Travel Stop in Williams, California surveyed by Fehr & Peers in June 2024. The details of this dataset are presented below.

Trip Generation Study at Love's Travel Stop in Williams, California

Fehr & Peers retained NDS to conduct a two-day count at the Love's Travel Stop located in Williams in Colusa County on Wednesday, June 26 and Thursday, June 27, 2024. This stop is situated at 100 Marguerite Street immediately south of SR 12 and less than one-half mile east of I-5. It consists of the following amenities:[12]

- 14 auto fueling positions
- 8 diesel truck fueling positions
- 15,000 sq. ft. convenience store featuring fast food restaurant with drive-through window, and various other specialty foods.

Table B-1 in **Appendix B** displays the data from each count day at the Williams site including the number of truck and auto trips generated during the AM and PM peak hours and from 6 AM to 8 PM. Footnotes in this table describe the peak hours of travel.

Overall, the busiest hour of travel was 2:30 – 3:30 PM with a total of 356 auto and trucks trips generated. This total is about 10% greater than the two-day average PM peak hour trip total of 323 trips. It is unlikely that 2:30 to 3:30 PM is the busiest overall hour of travel on surrounding roadways near the project site in Susanville. So, trips generated during the busiest 60 minutes of the typical peak hour of adjacent street traffic window, which occurs between 3 and 6 PM, were used to determine the Williams' site PM peak hour trip generation.

Table B-2 in **Appendix B** shows how the 6 AM to 8 PM trips generated by the Love's Travel Stop in Williams were extrapolated to obtain a 24-hour daily volume based on published data from the *TGM*. This approach is routinely used to estimate daily trips when cameras (versus less expensive hose tube counts) are necessary to collect data.

[12] Sources: Love's Travel Stops (loves.com) and measurement of building size using Google maps.

Trip Generation Studies at Six Love's Travel Stops in Central and Southern California

This study is summarized in a report entitled *Final Technical Paper: Love's Trip Generation and Travel Characteristic Study* (GHD, 2018). According to that report, each site was counted for a 3-day period on Tuesday, November 7, 2017 through Thursday, November 9, 2017. Fehr & Peers developed a database of these sites that includes project site attributes, project vicinity attributes, and vehicle trips generated at each site (see **Table 5**).

Development of this database required review of aerial imagery (dating back to 2017). The Love's Travel Stop in Williams was added to the database to create a total of seven (7) counted sites whose travel characteristics will be analyzed to determine the proposed project's trip generation.

Table 5 shows the averages across the 7 sites. In terms of trip generation, they generate an average of 4,620 daily trips (49% trucks), 236 AM peak hour trips (51% trucks) and 274 PM peak hour trips (41% trucks).

When considering auto trips only, there is a substantial variation in trip rates when expressed in terms of auto trips per auto Vehicle Fueling Position (VFP):

- Daily: Average = 158 trips/VFP (Low = 91 trips/VFP and High = 251 trips/VFP)
- AM Peak Hour: Average = 7.7 trips/VFP (Low = 4.5 trips/VFP and High = 13.9 trips/VFP)
- PM Peak Hour: Average = 10.8 trips/VFP (Low = 6.0 trips/VFP and High = 16.2 trips/VFP)

Similarly, there is a substantial variation in truck trip rates when expressed in terms of truck trips per truck VFP, as evidenced by the following:

- Daily: Average = 281 trips/VFP (Low = 216 trips/VFP and High = 468 trips/VFP)
- AM Peak Hour: Average = 15.0 trips/VFP (Low = 11.2 trips/VFP and High = 23.0 trips/VFP)
- PM Peak Hour: Average = 13.9 trips/VFP (Low = 10.8 trips/VFP and High = 22.0 trips/VFP)

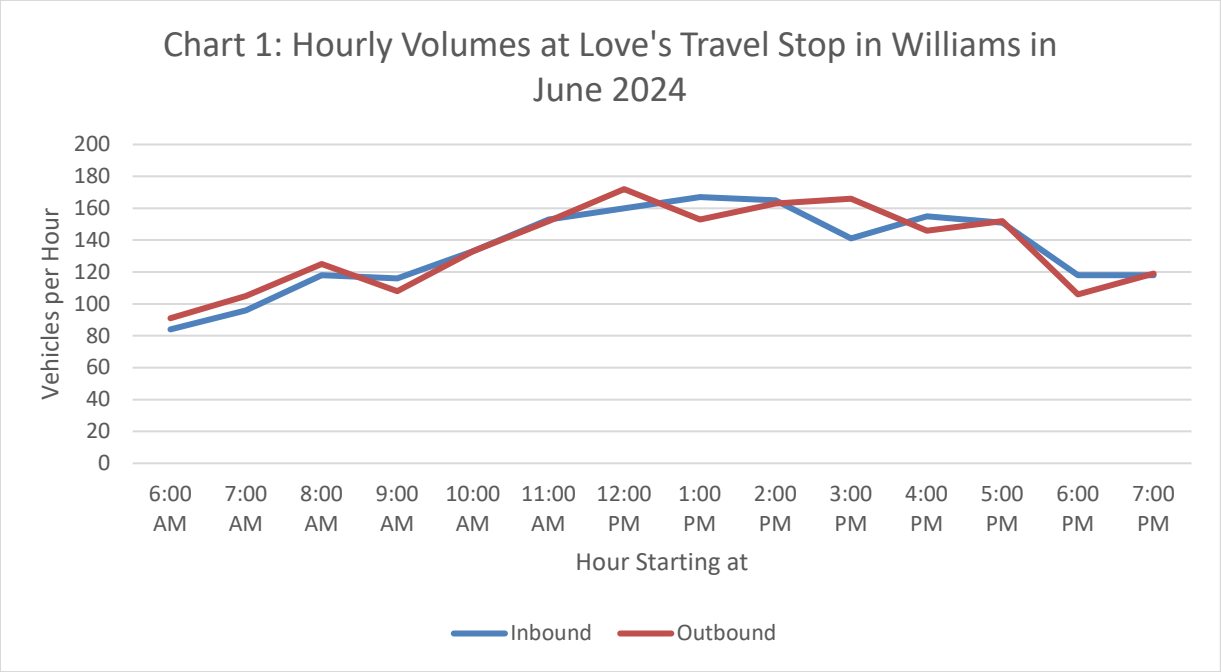
From this data, several trends are apparent:

1. *Vehicle fueling positions (VFP) is not the only site attribute variable affecting trip generation rates*. This is evidenced by the fact that truck trip rates per VFP are considerably higher than auto trips per VFP despite trucks taking much more time to fill up. As part of the site visit, truckers also use truck parking to take legally required breaks from driving. Those may or may not also involve fueling up, so it would be improper to only use VFP as the explanatory variable.
2. *Love's Travel Stops have dispersed time-of-day arrival and departure travel characteristics*. This is apparent from a comparison of AM and PM peak hour trip totals versus daily totals. **Chart 1** shows this graphically using the Williams site as an example.

Table 5: Love's Travel Stops in California Traffic Count Database

Love's Travel Stop Location	Main Highway / Cross Street	Project Site Attributes [1]					Project Vicinity Attributes				Vehicle Trips Generated					
											Auto Trips			Truck Trips		
		Building Size	Auto Fuel Positions	Truck Fuel Positions	Truck Parking Spaces	Drive -Thru Rest?	Daily [2] Autos on Adjacent Highways	Daily [2] Trucks on Adjacent Highways	#of [3] Adj. Truck Stops	# of Adj.[3] Quick Serve Rest.	Daily	AM Peak Hour	PM Peak Hour	Daily	AM Peak Hour	PM Peak Hour
Lodi	I-5 / SR 12	10,500	16	8	90	Yes	46,200	11,900	1	1	3,348	154	235	2,140	113	94
Santa Nella	I-5 / SR 33	9,900	12	8	85	Yes	20,300	8,800	1	3	1,096	54	72	2,069	112	105
Tulare	SR 99 / Paige Ave	10,400	16	9	105	Yes	43,300	13,700	0	0	4,017	223	245	2,894	160	148
Lost Hills	I-5 / SR 46	7,900	12	7	75	Yes	30,000	10,500	1	3	2,106	85	122	1,877	94	94
Barstow	I-15/ Lenwood Rd	9,400	16	10	90	No	44,100	13,900	3	1	1,536	80	112	2,222	112	121
Coachella	I-10 / Dillon Rd	7,300	16	6	52	Yes	18,400	10,800 [4]	1	2	1,885	93	123	2,807	138	132
Williams	I-5 / SR 20	15,000	14	8	88	Yes	22,100	6,900	0	0	2,623	123	227	1,726	109	86
Average		10,100	15	8	84	-	32,100	11,000	1	1	2,373	116	162	2,248	120	111

Notes:
[1] Sources: Love's Travel Stops (loves.com) and *Final Technical Paper: Love's Trip Generation and Travel Characteristic Study* (GHD, 2018)
[2] Based on 2016 for all sites except Williams site which was based on 2022 Caltrans data.
[3] Project vicinity attributes as of the date of the traffic data collection.
[4] Correction to GHD report to reflect correct AADT truck volume, plus also modest levels of truck traffic accessed from SR 86, which diverts from I-10 one-mile away.
Building size and ADT rounded to the nearest one hundred square feet or vehicles.
Source: Fehr & Peers, 2025.



Additionally, the relative amount of trips from each site that are trucks also varies considerably. Trucks were just 39% of all daily trips at the Lodi site, but 65% of trips at the Santa Nella site. On average, trucks represented 49% of all trips.

Statistical Analysis of Love's Travel Stops Traffic Count Database

Given the wide range of trip rates per VFP observed at the sampled sites, it is likely that multiple site attribute and project vicinity factors are affecting trip generation. To quantify the extent to which individual variables are correlated with trips generated, the coefficient of correlation was calculated for the various potential explanatory variables. The correlation coefficient measures the strength and direction of a relationship between two variables. A value of 1 indicates perfect positive correlation (i.e., as one variable increases, the other also increases), while a value of -1 indicates a perfect negative correlation (as one variable increases, the other decreases. A value of 0 indicates no correlation for relationship between the two variables.

Separate correlation coefficient calculations were conducted against truck and auto trips. Those results are shown in **Tables B-3** and **B-4** of **Appendix B**, respectively. Key findings of these tests are:

- The number of truck trips generated is most correlated (in a positive direction) to the amount of truck traffic on adjacent highways/freeways. The number of VFPs has little to no correlation with trips generated.

- The number of auto trips generated has a moderately positive correlation to the number of auto VFPs, presence of a drive-through lane at the on-site fast-food restaurant, auto traffic on the adjacent highway/freeway and convenience store building size. Auto trips generated is negatively correlated with the number of adjacent quick serve restaurants in the project vicinity.

Derivation of Trip Generation Equations for Proposed Project

Regression models estimate the value of an independent variable (in this case number of truck or auto trips generated) based on various explanatory variables (such as those described above). Provided they have a strong goodness of fit, regression models are an effective way to predict the value or outcome of a hypothetical project not included in the database provided its explanatory variable values are known.

Typically, a dataset of at least 30 observations or data points is desired when developing regression models. This allows for strong predictive power, use of multiple explanatory variables, and applicability over a wide range of inputs. Regression models are provided in the *Trip Generation Manual* for numerous land use categories, sometimes with as few as 4 or 5 data points. The models generally utilize a single explanatory variable, such as number of dwelling units, square feet, etc. and often have poor goodness of fit statistics.

A set of 6 different regression models were estimated using the Love's Travel Stop Traffic Count database. Separate equations were developed for truck trip generation and auto trip generation for AM peak hour, PM peak hour, and daily conditions. The results are shown in Tables B-3 and B-4.

The trip generation estimates require one more step involving a check to ensure that SR 36 has sufficient auto and truck trips to support the trip generation estimates. This is discussed in the following section.

Proposed Project Total Trips Generated

Table 6 presents the proposed project's gross number of vehicle trips generated, separated either as auto or truck trips. The detailed calculations are shown in **Appendix B.**

Table 6 indicates that the proposed project would generate about 1,200 daily trucks with about 70 occurring during the AM peak hour and 50 occurring during the PM peak hour. This is about 47% fewer daily truck trips than the average from the Love's Travel Stops dataset. This is to be expected because the proposed project would be situated adjacent to a highway that carries far fewer trucks when compared to the average from the dataset. And as was illustrated above, the best determinate for truck trip generation is the amount of adjacent street truck traffic.

Table 6:
Proposed Project Total Trips Generated

Land Use	Daily [3]			AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
Love's Travel Stop – Truck Trips [1]	597	596	1,193	34	35	69	27	25	52
Love's Travel Stop – Auto Trips [1]	1,149	1,149	2,298	55	52	107	73	80	153
Fast-Food Restaurant without Drive-Through Lane [2]	360	361	721	40	29	69	27	26	53
Overnight RV Parking [3]	20	20	40	1	3	4	2	2	4
Total Trips	2,126	2,126	4,252	130	119	249	129	133	262

Notes:
1. Based on equations in Tables B-3 and B-4 in Appendix B. Traffic Count Database. Note that fast-food restaurant with drive-through window is reflected in these trips.
2. Based on rates published in the *Trip Generation Manual*, 11th Edition (Institute of Transportation Engineers, 2021). Majority of sites in Love's database consisted of a single on-site fast-food restaurant. Of the couple of sites that had two such restaurants, the second one was typically a smaller, off-brand establishment. Accordingly, it was deemed necessary to include this second fast-food restaurant separately in the trip generation estimate to ensure its trips are properly considered.
3. Fehr & Peers staff conducted counts at the Overnight RV lot at the Love's Travel Stop in Brigham Utah on July 25, 2024. According to the Love's website, 27 of 43 sites at that location were reserved as of 3 PM that day. During the 4:30 – 5:30 peak hour, there were 4 inbound trips and 3 outbound trips. 1 inbound trip was an RV with the remainder being cars (presumably maintenance, visitors, vehicles otherwise attached to the RV). Trip generation levels adjusted based on fewer RV spaces at project site. Of total RV Parking trips above, RVs represent 50% of daily trips, 2 of the 4 AM peak hour trips, and 1 of the 4 PM peak hour trips.

Source: Fehr & Peers, 2025.

Table 6 also shows that the proposed project would generate approximately 3,020 daily auto trips with 180 occurring in the AM peak hour and 210 occurring during the PM peak hour. These totals represent gross auto trips (excluding trucks and RVs) generated by the proposed project. The next section discusses how some trips to the site will be 'pass-by'.

Trucks would represent 28% of all vehicles entering the site on a daily basis.

Consideration of Pass-by Trips

A "pass-by" trip is defined as a trip already on the adjacent roadway that enters a commercial center en route to a different primary destination. Often, this is for the purpose of purchasing gas or food, or other short duration behaviors. Pass-by trips add traffic to the commercial center driveway, but do not add trips to the roadway itself.

ITE's *Trip Generation Manual* contains data for the following land use types: Fast Food Restaurant with Drive-Through Window (LUC 934) and Convenience Store/Gas Station (LUC 945). That data, though far from complete, is shown in **Table 7**.

Table 7: Potential Pass-by Trip Reductions for Proposed Project			
Land Use	**Pass-by Trip Percentage as a Function of All Trips Generated**		
	Daily	**AM Peak Period**	**PM Peak Period**
Fast Food Restaurant without Drive-Through Window (LUC 933) [1]	Not Shown	Not Shown	Not Shown
Fast Food Restaurant with Drive-Through Window (LUC 934) [1]	Not Shown	50%	55%
Convenience Store/Gas Station (LUC 945) [1]	Not Shown	76%	75%
GHD Survey at Six (6) Love's Travel Stops [2]	88%	Not Shown	

Notes:
1. Source: *Trip Generation Manual* (Institute of Transportation Engineers, 2021).
2. Source: *Final Technical Paper: Love's Trip Generation and Travel Characteristic Study* (GHD, 2018).

As part of the *Final Technical Paper: Love's Trip Generation and Travel Characteristic Study* (GHD, 2018), the results of in-person surveying of customers at the six (6) Love's Travel Stops were presented. A total of 600 customers at these locations were asked 8 questions pertaining to their travel to the site. When asked "if they exited the freeway to get to Love's Travel Stop", 88% responded that they had. About half of the sample consisted of truck drivers with the other half identifying as 'auto customers'. The report did not disclose whether pass-by rates were higher or lower for truckers or auto customers.

The 88% diversion value is technically a diverted-link trip at most sites in the database (because the truck needs to leave the freeway). Diverted-link trips are not possible at the project site because there is not a nearby freeway from which to divert. So, the 88% value is inferred to apply to travelers on adjacent SR 36 who 'pass-by' to the project en route to their ultimate destination. Further, it is likely that trucks will have a slightly higher pass-by rate than the 88% value, while auto customers will have a slightly lower value based on the differing nature of those trip types.

Applying a 90% pass-by percentage for daily truck trips implies that 540 of the 1,220 trucks on the roadway (44%) would enter the project site. Also applying a 90% pass-by percentage for AM and PM peak hour truck trips implies that about 56% of AM peak hour trucks and 47% of PM peak hour trucks would enter the site. Normally, the percentage of pass-by trips coming from the adjacent traffic stream should not exceed 10% to 20% of the total volume present. But truck stops are unique given the long-haul nature of their trips and mandatory rest breaks. Additionally, the lack of other nearby truck stops along SR 36 further increases the likelihood that trucks will stop at this location.

The pass-by percentages for the project's auto trips component corresponds to fewer than 10% of auto trips on SR 36 passing by the site.

Table 8 shows the total project trips, pass-by trip reductions applied, and the resulting number of new trips generated during the AM and PM peak hours and on a daily basis. As shown, the project would generate approximately 920 new vehicle trips, with 66 occurring during the AM peak hour and 63 occurring during the PM peak hour.

This table shows a net increase of 60 inbound and 60 outbound daily truck trips. It is expected that there would be some new truck trips by virtue of the following:

- Given that any vehicle that uses diesel fuel can fill up a Love's Travel Stop, it is likely that some local diesel trucks would use this facility. Those could be new trips originating from a nearby residence or business.
- It is conceivable that some trucks that currently use US Highway 395 to travel from Reno northerly into Modoc County and into Oregon may decide to temporarily leave that route to turn onto SR 36 for 2.5 miles to access the project site to fuel up or rest. This is considered a new trip because it is added to SR 36.

Project Trip Distribution

Pass-by trips are assigned separately for auto and truck trips, and generally in proportion to the existing directional traffic flows on SR 36 and Skyline Road. Table 3 indicates that there are more southbound trucks than northbound trucks on SR 36 during the PM peak hour. Accordingly, there are more pass-by truck trips turning right from southbound SR 36 than turning left from northbound SR 36. The distribution of pass-by auto trips also considered the directional volume, as well as the ease of performing the maneuver (e.g., pair of right-turns from southbound SR 36) is perceived to be easier than a pair of left-turns (from northbound SR 36).

About three-quarters of new trips are expected to be distributed to/from the north on SR 36 (toward Downtown Susanville). This is intuitive since most customers (who are not passing by) and people working at the site are anticipated to reside in Susanville given its larger population than nearby communities.

Traffic Forecasts

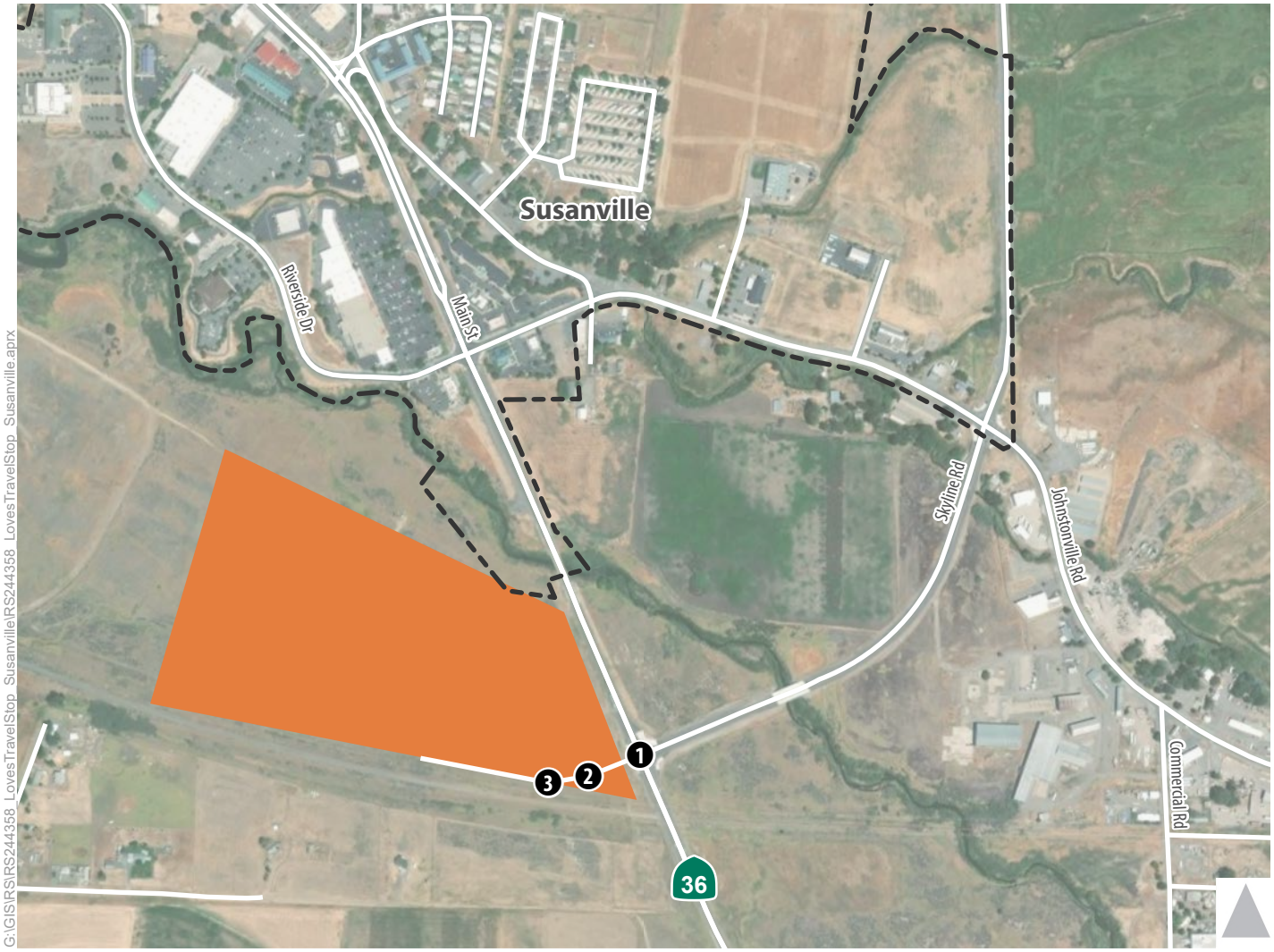
Project trips were assigned to the SR 36/Skyline Road study intersection and project driveways based on the expected trip generation, distribution, and assignment procedures described above. **Figure 6** shows the resulting existing plus project weekday AM and PM peak hour traffic volumes. **Table 9** displays the ADT on the roadways adjacent to the project site under existing plus project conditions. Data is broken down by passenger vehicles, trucks, and RVs.

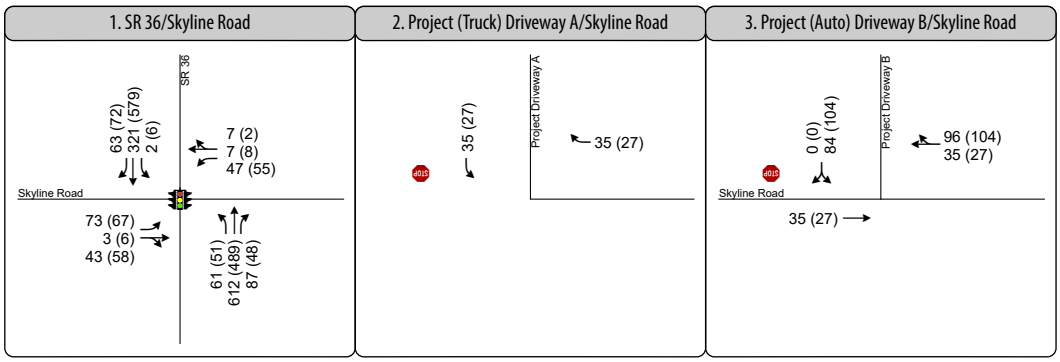
Table 8:
Proposed Project New Trip Generated

Land Use	Daily			AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
Total Trips [1]									
Love's Travel Stop – Truck Trips	597	596	1,193	34	35	69	27	25	52
Love's Travel Stop – Auto Trips	1,149	1,149	2,298	55	52	107	73	80	153
Fast-Food Restaurant without Drive-Through Lane	360	361	721	40	29	69	27	26	53
Overnight RV Parking	20	20	40	1	3	4	2	2	4
Total	2,126	2,126	4,252	130	119	249	129	133	262
Reductions for Pass-by Trips [2]									
Love's Travel Stop – Truck Trips	-537	-536	-1,073	-31	-31	-62	-24	-23	-47
Love's Travel Stop – Auto Trips	-977	-977	-1,954	-47	-44	-91	-62	-68	-130
Fast-Food Restaurant without Drive-Through Lane	-144	-144	-288	-16	-12	-28	-11	-10	-21
Overnight RV Parking	-10	-10	-20	0	-2	-2	-1	0	-1
Total	-1,668	-1,667	-3,335	-94	-89	-183	-98	-101	-199
New Trips									
Love's Travel Stop – Truck Trips	60	60	120	3	4	7	3	2	5
Love's Travel Stop – Auto Trips	172	172	344	8	8	16	11	12	23
Fast-Food Restaurant without Drive-Through Lane	216	217	433	24	17	41	16	16	32
Overnight RV Parking	10	10	20	1	1	2	1	2	3
Total	458	459	917	36	30	66	31	32	63

Notes:
1. Source of total trips generated is Table 6.
2. Pass-by trip percentage estimates applied as follows: Travel stop truck trips: 90%, Travel stop auto trips: 85%, fast food restaurant without drive through window: 40%, and Overnight RV Parking: 50%.

Source: Fehr & Peers, 2025.





Turn Lane

AM (PM) Peak Hour Traffic Volume

Traffic Signal

Stop Sign

Study Intersection

Project Site

Susanville City Limit

Note: Lane Configurations at SR 36/Skyline Road have not been determined. One viable option is shown here.

Figure 6

Weekday AM and PM Traffic Volumes and Lane Configurations - Existing Plus Project Conditions

Table 9:
Daily Traffic Volumes on SR 36 and Skyline Road Adjacent to Project Site – Existing Plus Project Conditions

Segment	Segment	Existing Conditions				Project Trips				Existing Plus Project Conditions			
		Total Veh	Pass Veh	Trucks	RVs	Total Veh	Pass Veh	Trucks	RVs	Total Veh	Pass Veh	Trucks	RVs
SR 36	North of Skyline Road	14,000	12,838	1,120	42	660	582	68	10	14,660	13,420	1,188	52
	South of Skyline Road	15,300	14,034	1,220	46	176	114	52	10	15,476	14,148	1,272	56
Skyline Road	East of SR 36	1,800	1,696	100	4	81	81	0	0	1,881	1,777	100	4
Skyline Road [1]	West of SR 36	Does Not Exist				4,252	3,019	1,193	40	4,252	3,019	1,193	40

Notes:
1. This segment includes both new and pass-by project trips, which explains why project volumes are much higher on it than other segments.

Pass Veh = Passenger Vehicles. RVs = Recreational Vehicles.
Source: Fehr & Peers, 2025.

95th Percentile Queues at SR 36/Skyline Road Intersection – Existing Plus Project Conditions

The SimTraffic model, used to estimate the existing 95th percentile queue lengths, was also used to analyze existing plus project queuing conditions at the study intersection under geometric/signal phasing Alternatives 1 and 2. The model considered both the amount of traffic and percent that are trucks. Where crosswalks were added, modest levels of pedestrian activity were assumed. **Table 10** shows the existing plus project 95th percentile queue lengths for all turning movements at the study intersection under each alternative (refer to **Appendix C** for technical calculations). Key findings from this table include:

- Northbound and southbound through lanes would experience substantially longer queues. This is due to the change in signal timing resulting from a new leg to the intersection. Queues are somewhat longer under Alternative 1 (east-west split phasing).
- The applicant proposed 300-foot long northbound left-turn lane would have a (rounded) 95th percentile queue of 150 feet under either geometric alternative.
- The applicant proposed 250-foot long southbound right-turn lane would have a (rounded) 95th percentile queue of 175 feet under Alternative 1 and 150 feet under Alternative 2.

- The new eastbound approach to the intersection would have (rounded) 95th percentile queues of 150 feet or less under either geometric alternative. Queued traffic would not spill back to the closest driveway (Driveway B), which is 600 feet west of SR 36.

Table 10:
95th Percentile Vehicle Queues at the SR 36/Skyline Road Intersection – Existing Plus Project Conditions

Direction	Movement	Available Storage[2]	95th Percentile Queue[1]					
			Existing Conditions		Existing Plus Project Conditions [3]			
					Alternative 1 Geometrics and Signal Phasing		Alternative 2 Geometrics and Signal Phasing	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Northbound	Left	n.a. / 300 feet	Does Not Exist		137	123	152	125
	Through	2.4 miles	165	134	278	231	265	209
	Right-Turn	500 feet	40	31	46	39	44	40
Southbound	Left-Turn	310 feet	12	23	11	64	7	17
	Through	2,100 feet	108	139	209	432	191	389
	Right	n.a. / 250 feet	Does Not Exist		76	176	72	150
Westbound	Left-Turn	275 feet	69	63	87	91	71	76
	Right-Turn	2,400 feet	17	8	14	7	44	39
Eastbound	Left-Turn	n.a. / 600 feet	Does Not Exist		136	122	146	115
	Right-Turn	n.a. / 600 feet	Does Not Exist		78	96	76	103

Notes:
1. 95th percentile queue based on output from SimTraffic model.
2. Storage measured based on aerial imagery using length of turn pocket or distance to upstream intersection for through movements. Length of proposed new travel lanes based on project's civil engineer drawings.
3. Alternative 1 is the split phase east-west phasing option, while Alternative 2 is the protected left-turn east-west phasing option.
n.a. = Not applicable as turn lane does not exist under given scenario.
Source: Fehr & Peers, 2025.

Readers should not construe the values shown in Table 10 to be the recommended amount of storage to be provided in the new turn lanes on SR 36 to be built by the project. Caltrans also requires deceleration to be provided at turn lanes on state highways. Coordination with Caltrans will be required to determine the required amount of vehicle storage and deceleration in these turn lanes.

VMT Considerations

Table 11 shows the number of new daily trips generated by all project travel components. (i.e., passenger vehicle fuel pumps, truck fuel pumps, truck parking, convenience market, fast-food restaurants, and overnight RV parking). Also shown is the estimated average length of these trips (refer to table footnotes for derivation of trip lengths). Finally, the VMT is shown, which is the product of daily trips and trip length.

Table 11:
Project-Related New Passenger Vehicle, Recreational Vehicle, and Truck VMT Generation

Vehicle Type	New Daily Trips [1]	Trip Length [2]	VMT [3]
Passenger Vehicles [4]	777	2.2 miles	1,709
Recreational Vehicles (RVs)	20	75 miles	1,500
Trucks [5]	120	2.4 miles [6]	288

Notes:
1. Source of new trips is Table 8.
2. Passenger vehicle trip length based on weighted average of the following likely trip origins/destinations: Downtown Susanville Area (75% of all new trips at 2 miles one-way, Skyline Road north toward Lassen Community College (10% of all trips at 3 miles one-way, and Johnstonville South (15% of all trips at 2.5 miles one-way). RV trip length based on half of trips originating/destined for Reno (84 miles one-way) and the other half originating/destined for the south entry/exit of Lassen National Park (67 miles).
3. VMT is the product of new daily trips and trip length.
4. Also includes SUVs, and light duty trucks.
5. Consists of medium- and heavy duty trucks.
6. Average one-way trip length of 2.4 miles assumed based on average travel distances to the site for local diesel trucks (2.2 miles) and trucks diverting off US Highway 395 (2.5 miles).

Source: Fehr & Peers, 2025.

Passenger vehicles and trucks that leave SR 36 to access the project site would also generate a small amount of VMT, which is shown in **Table 12**.

Table 12:
Project-Related Pass-by Passenger Vehicle, Recreational Vehicle, and Truck VMT Generation

Vehicle Type	Daily Pass-by Trips [1]	Pass-by Trip Length [2]	VMT [3]
Passenger Vehicles [4]	2,242	750 feet	318
Recreational Vehicles (RVs)	20	750 feet	3
Trucks [5]	1,073	1,250 feet	254

Notes:
1. Source of pass-by trips is Table 8. Note that these are one-way inbound or outbound trips.
2. Pass-by trip length estimated based on distance from SR 36 to auto and truck driveway (plus nominal travel within site).
3. VMT is the product of new daily trips and trip length.
4. Also includes SUVs, and light duty trucks.
5. Consists of medium- and heavy duty trucks.

Source: Fehr & Peers, 2025.

4. CUMULATIVE SETTING

This chapter begins by describing the cumulative setting, which considers reasonably foreseeable land developments and planned transportation improvements. Project effects under this scenario are then analyzed.

Land Use Growth

Forecast land use growth in Susanville and Lassen County is derived from several sources of information including historic growth as documented by the US Census, California Department of Finance (DoF) projections, and various planning documents. Each of these data sources and key findings from them on this topic are described below:

US Census Data

According to the US Census[13], the population of Susanville grew from 13,541 persons in the 2000 Census to 17,947 persons in the 2010 Census. It declined to 16,735 persons in the 2020 Census, as the US Census reported that year. As of the most recent available data (as of this report writing) of July 1, 2023, Susanville had a population of 12,689 persons, a 24% decrease from the population as reported in the 2020 Census.

According to the US Census OnTheMap webpage[14], there were approximately 5,422 jobs in Susanville in 2022. The most common jobs were public administration (44%), followed by health care and social services (15%), educational services (10%), retail trade (9%), and accommodation and food service (8%). According to the same website, there were 5,859 jobs in 2011, and 2,470 jobs in 2002. Note that 2022 is the most recent year for which this data is available.

Jobs that may have a trucking component (i.e., Agriculture, Forestry, Fishing and Hunting, Construction, Manufacturing, Wholesale Trade, Transportation and Warehousing, and Waste Management and Remediation) totaled 4.7% of all jobs with 256 jobs in those categories. In 2011, that total was only 2.2% of all jobs, with the vast majority of the increase being manufacturing jobs.

13 Source: U.S. Census Bureau QuickFacts: Susanville city, California. Accessed on April 7, 2025.

14 Source: OnTheMap (census.gov). Accessed on August 14, 2025.

Based on this data source, the following conclusions are drawn:

- The number of residents in the City of Susanville has been decreasing (24% decrease occurring from 2020 to 2023).
- The number of jobs located within the City Limits has been decreasing modestly (7% decrease from 2011 to 2022). In contrast, the number of jobs that may be affiliated with trucking has risen from 2.2% in 2011 to 4.7% in 2022, with most of the increase being manufacturing jobs.

California Department of Finance Projections

DoF projections are provided at the county-level and not made for individual cities. According to DoF projections[15], Lassen County had 27,483 residents in 2024. Total population in the county is expected to decrease to 23,819 persons in 2035, and 22,569 persons in 2045. This represents an 18% decrease in population between 2024 and 2045. As the City of Susanville currently represents 46% of the total population of Lassen County, it is likely that these county-wide decreases will also result in fewer residents in Susanville over time.

Caltrans

The Transportation Economics Branch of Caltrans assists local and regional agencies in their planning and travel forecasting efforts by preparing long-term socio-economic forecasts for each county in the state. [16] Between 2024 and 2045, Lassen County is expected to experience a 21% decrease in jobs. This decrease is aligned with the population decrease referenced above.

City of Susanville Draft General Plan.

The Land Use and Community Development Chapter of the proposed General Plan[17] update states the following with respect to land use growth in the area:

- *"The intent behind the expanded City boundary through a potential annexation is to capture fringe employment-based areas, specifically those which are industrially focused." The proposed growth area would allow the City to expand its tax base revenue and better regulate development along it's boundary."*

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15 Source: Projections | Department of Finance (ca.gov). Accessed on April 4, 2025.

16 Long-Term Socio-Economic Forecasts by County | Caltrans. Accessed on April 4, 2025.

17 Source: Index of /rooptown/wp-content/uploads/2023/06 (cityofsusanville.net). Accessed on August 5, 2024.

- *A future annexation of the industrial areas would also provide the City with land use control to determine future allowable uses that can ultimately benefit the community as well as properly mitigate such uses in the future."*

However, there are no draft land use proposals, prezoning, or related information available that would enable development of any projections of added traffic in the annexation areas. Note that the project site location is within City's Sphere of Influence.

SR 36 Complete Street and Safe Mobility Report

Page 18 of this report states the following with regard to future year traffic forecasts:

- *The population trend for Susanville and Lassen County has been going down over the past several years. The most significant factor for this plan is the potential decrease in projected traffic volumes due to decreased population. Rather than developing new traffic forecasts, the plan reviewed the traffic analysis from the 2019 CAPM project. The analysis states that forecasted traffic will not adversely affect LOS along the corridor.*

Planned Transportation Improvements

The Circulation Element Update to the City of Susanville General Plan describes several planned transportation system improvements. Most consist of street overlays to repair aging pavement. Other improvements include sidewalk repairs, high school safety improvements, and pedestrian safety improvements. The document also cites the *State Route 36 Complete Streets and Safe Mobility Plan,* which outlines the following priority "complete streets" improvement projects described below:

- Uptown Gateway & Urban Greening Project. This project focuses on revitalization of the Uptown by constructing a gateway feature and installing landscaping and irrigation. The project will improve aesthetics and enhance safety for pedestrians. These features have been shown to provide traffic calming as vehicle speeds tend to reduce when the surrounding environment has been developed to a pedestrian scale.
- Uptown Complete Street Lane Reallocation Project. This project would implement State Route 36 Complete Streets and Safe Mobility Plan's Lane reallocation improvements proposed in the Uptown District. Reducing the number of travel lanes from four to two will create room for left-turn lanes which currently do not exist. Reducing the number of lanes also reduces the number of conflict points between vehicles and pedestrians, enhancing safety for all users.

The *Lassen County Regional Transportation Plan* (2023) identifies the connection of the Skyline Road bike trail with the Bizz Johnson National Recreation Trail as a high priority project. The alignment shown in Figure 10 of that document shows this planned Class I trail extending along the Skyline Road extension near the project site.

Cumulative Vehicle Queuing and VMT Considerations

As documented earlier in this section, background traffic over the next 20 years is not expected to increase in the study area. Accordingly, an analysis of vehicle queuing of a cumulative plus project condition at the SR 36/Skyline Road intersection would not reveal greater queues than what is shown in Table 10. Thus, the cumulative conditions chapter does not present any such information.

In some instances, a proposed project's VMT could change between existing and cumulative conditions if new modes of travel become available, new land uses are built nearby, or other transportation system characteristics change. However, no such changes are expected in the study area. Therefore, the project VMT estimates shown in Tables 11 and 12 apply to both existing and cumulative conditions.

5. IMPACTS AND MITIGATION MEASURES

This chapter begins by presenting the thresholds of significance to be used to identify significant adverse transportation impacts. It then identifies the project-specific impacts of the proposed project based on those thresholds. Impact statements are provided for the topics of VMT and roadway safety/hazards, which are the criteria used to evaluate roadway system impacts. Impact statements are also provided for the bicycle, pedestrian, and transit systems, as well as emergency response.

Mitigation measures are recommended to lessen the significance of identified impacts. This chapter does not draw conclusions as to whether the mitigation measure would mitigate the impact to a less than significant level or whether the impact would remain significant after mitigation. Such conclusions are presented in the EIR based on the data provided here.

Thresholds of Significance

The following thresholds of significance are used to determine whether implementing the proposed project would result in a significant environmental impact. The thresholds are based on guidance from Appendix G of the CEQA Guidelines, and policies of the City of Susanville and other responsible agencies listed previously. The proposed project would cause a significant impact if it would:

Roadway Network

1. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) by substantially increasing VMT in the region.

Bicycle and Pedestrian Network

2. Conflict with adopted policies, plans, or programs regarding bicycle or pedestrian facilities.

Transit Services and Facilities

3. Disrupt existing or planned transit facilities or conflict with adopted policies, plans, or programs regarding transit facilities or services.

4. Create a demand for transit that is currently unmet.

Hazards

5. Cause the 95th percentile queue length in a left- or right-turn lane at a state highway intersection to exceed the available storage.
6. Substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses.

Emergency Vehicle Response

7. Adversely affect emergency vehicle response times.

Project-Specific Impacts and Mitigation Measures

Roadway Network VMT

Impact TR-1: Adverse VMT Impacts Caused by Project

Lassen County and the City of Susanville do not have established VMT thresholds or standards; as such, the guidance provided in the *Technical Advisory* was initially consulted in this analysis. The *Technical Advisory* generally recommends a 15% reduction from baseline VMT per capita or per employee for residential and office projects, respectively. For retail projects, the *Technical Advisory* recommends a threshold of no net increase in total VMT for the area or region. The *Technical Advisory* also acknowledges that "residential, office, and retail projects tend to have the greatest influence on VMT." The Project, however, is not a residential or office development. Similarly, while the project includes retail components, travel patterns and behaviors associated with travel stops are unique, as discussed in the Trip Generation section above. In such situations, the *Technical Advisory* recommends that lead agencies consider the purposes described in Public Resources Code section 21099, which, as discussed above, includes the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. Based on the guidance in the *Technical Advisory* and CEQA Guidelines section 15064.3, subdivision (b), and because the project does not fit within the residential, office, retail categories set forth in the *Technical Advisory*, the City has elected to assess the project's change in total VMT for trips by workers and visitors. The Susanville General Plan Circulation Element includes information on VMT per capita for home-based residential travel. However, it does not provide any information on VMT per employee or service population, so an apples-to-apples comparison of project generated visitor and worker VMT to citywide VMT averages from the Circulation element is not possible. Accordingly, as permitted by Guidelines section 15064.3, subdivision (b)(3), the City has elected to qualitatively analyze the project's potential VMT impacts.

The project is considered a VMT-efficient land use and would not substantially increase VMT in the region. As described in detail in the Trip Generation section, the vast majority (90% of trucks and 74% of passenger vehicles) of trips to the travel stop would already be on adjacent streets and then enter the site. On-site jobs would primarily be filled by Susanville residents, requiring a relatively short trip (less than three miles) to the site. There are other fast-food restaurants and gas stations less than one-half mile to the north and still others in downtown Susanville. The presence of these "intervening opportunity" facilities demonstrates that the project's gas station, convenience market, fast-food restaurants will not be a major generator of new trips and/or VMT. The overnight RV parking spots are anticipated to serve existing trips on their way to their final destination by providing customers with a temporary place to relax, refuel, and recharge. Many recreational destinations are situated in proximity to Susanville, but the City itself is not a major tourist destination. Accordingly, overnight RV guests is not anticipated to generate many mid-day local trips. Furthermore, the project applicant anticipates the average night per stay would be one night per visitor, meaning RVs are not arriving at the site for the primary purpose of extended stays in Susanville. Thus, the 20 new daily recreational vehicle trips would have a negligible effect on overall VMT generation in the City and the region.

The project site itself is also considered VMT-efficient based on data from the City's Circulation Element. The project site is situated in a Census Block Group (CBG) whose average home-based VMT per capita (i.e., person) is 11.2 miles. This is amongst the lowest VMT generation rates anywhere in the city (only one CBG has a lower value and that is 10.8 miles per capita), and far less than outlying areas in the northeast and northwest areas of the city, which generate VMT per capita in the 14 to 16 mile range. As stated above, an "apples-to-apples" numeric comparison of the project's VMT generation to the home-based VMT per capita metric used in the Circulation Element is not possible. As acknowledged in the *Technical Advisory*, however, "location within the region is the most important determinant of VMT" and siting development in "travel efficient locations" can be an effective means of reducing regional VMT. Accordingly, locating the project in a low VMT area of the City is likely to result in a similar level of VMT, provided that the project itself would not substantially increase VMT in the area.

The efficiency of this land use type can also be demonstrated by conducting a comparative VMT review against a reasonable alternative land use proposal. Because the Circulation Element only provides information on home-based VMT per capita, this analysis compares the project's VMT generation to VMT generated by a hypothetical residential development. While the site is not currently designated for residential use, the project proposes annexation of the site into the City with a General Commercial/Shopping Center land use designation and corresponding C-2 (General Commercial Shopping District) zoning, which permits residential development at up to 20.0 units per acre. If the approximate 14-acre site were to be developed at an average of 12 units per acre (i.e., a mix of single-family and multi-family), the yield would be 168 units. According to the US Census, average household size in Susanville is 2.5 persons per household, implying this hypothetical project could have 420 residents. Per the Circulation Element, each resident would generate 11.2 VMT, yielding a total of 4,704

VMT. The proposed project's total VMT generated (4,136 per Tables 11 and 12) is 12% less than the VMT of the hypothetical residential project, which itself is considered to be a VMT-efficient use.

Altogether based on the above, the proposed project is a VMT-efficient land use situated in a VMT-efficient area of the City and would not substantially increase VMT in the region. Accordingly, this impact is **less than significant,** and no mitigation is required.

Bicycle and Pedestrian Facilities

Impact TR-2: Conflicts with Adopted Policies, Plans, or Programs Regarding Bicycle or Pedestrian Facilities

The project would not eliminate or adversely affect an existing bikeway or pedestrian facility in a way that would discourage its use. The project would add a sidewalk along its frontage along Skyline Road and one or more crosswalks at the SR 36/Skyline Road intersection. The Skyline Road typical cross-section exhibit provided by the site civil engineer shows a 10-foot wide future Class I multi-use path located on the south side of Skyline Road. This facility will enable future construction of the westerly Skyline Road extension to the Bizz Johnson National Recreational Trail (at Richmond Road). Since the project would not conflict with adopted policies, plans, or programs regarding bicycle or pedestrian facilities, this impact is **less than significant**, and no mitigation is required.

Transit Services and Facilities

Impact TR-3: Inadequate Transit Service to Meet Demand

The project would not eliminate or adversely affect existing transit access as no service is currently provided in the immediate project vicinity. Transit service within the city is provided via both fixed-route and demand-based service. The nearest bus stop to the project site is located within the Safeway Shopping Center situated in the northwest quadrant of the SR 36/Riverside Drive intersection, which is about 2,000 feet north of the project site. As noted in the draft Circulation Element for the City of Susanville General Plan, the automobile is the primary mode of travel in the city. According to the 2020 US Census, 0.7% of Susanville residents used public transit to travel to work.[18] Given this, the fact that there are relatively few employees at the site, that there are demand-responsive transit services provided in the city (for certain groups) and that the proposed use is vehicle-centric, the impact associated with an unmet demand for transit is considered **less than significant,** and no mitigation is required.

[18] Susanville city, California - Census Bureau Profile

Roadway Safety / Design Standards:

Impact TR-4: State Highway Intersection Queuing

Table 10 indicates that under Existing Plus Project conditions, all 95th percentile vehicle queues at the SR 36/Skyline Road intersection would be less than the available storage (or planned storage for future lanes) during the AM and PM peak hours. Therefore, this impact would be **less than significant,** and no mitigation is required.

Impact TR-5: Increased Hazards

The project access (SR 36/Skyline Road) is a recently installed signalized intersection with a number of safety-related features, which were described in Chapter 2. The project would not introduce a new geometric design feature that is inherently unsafe. The project access intersection (SR 36/Skyline Road) does not have a collision history that could become exacerbated by the addition of project trips. For these reasons, this impact would be **less than significant,** and no mitigation is required.

Emergency Vehicle Response

Impact TR-6: Adversely Affect Emergency Vehicle Response Times

The Susanville Fire Station is located in Downtown Susanville, 1.7 miles to the north. The signal equipment at the SR 36/Skyline Road intersection includes emergency vehicle signal pre-emption equipment. The project would not cause undue delays that would adversely affect emergency vehicle response times. For these reasons, this impact would be **less than significant,** and no mitigation is required.

Cumulative Project Impacts and Mitigation Measures

Due to the lack of anticipated land use growth and increases in traffic levels in the study area and the absence of any major planned transportation impacts, cumulative project impacts and mitigations would be the same as project-specific impacts and mitigations.

Appendix A: Existing Conditions Technical Calculations

Intersection: 1: SR 36 & Skyline Road

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	R	L	T
Maximum Queue (ft)	88	21	193	49	25	147
Average Queue (ft)	30	4	77	14	2	44
95th Queue (ft)	69	17	165	40	12	108
Link Distance (ft)		2506	1647			1817
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	275			495	310	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 0

Intersection: 1: SR 36 & Skyline Road

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	R	L	T
Maximum Queue (ft)	75	18	164	43	32	166
Average Queue (ft)	30	1	62	8	5	68
95th Queue (ft)	63	8	134	31	23	139
Link Distance (ft)		2506	1647			1817
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	275			495	310	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 0

Appendix B: Trip Generation Technical Information

Trip Generation Estimates for Love's Travel Stop

INPUTS

# of Daily Trucks on Adjacent Highways	1220
# of Adjacent Truck Stops	0
# of Truck Fueling Positions	4
# of Auto Fueling Positions	12
Auto ADT on Adj Hwy / 1,000	14.08
# of Adj. Quick Serve Rest	0
Fast-Food Drive-Through Lane Present	1

OUTPUTS

Number of AM Peak Hour Truck Trips =	69
Number of PM Peak Hour Truck Trips =	52
Number of Daily Truck Trips =	1193
Number of AM Peak Hour Auto Trips =	107
Number of PM Peak Hour Auto Trips =	153
Number of Daily Auto Trips =	2298

EQUATIONS

TRUCKS

AM Peak Hour:

Number of AM Peak Hour Truck Trips = 60.4 + 0.0069 (Number of Daily Trucks on Adjacent Highways) -15.74 (# of Adjacent Truck Stops)

PM Peak Hour:

Number of PM Peak Hour Truck Trips = 44.1 + + 0.0061(# of Daily Trucks on Adjacent Highways)

Daily:

Number of Daily Truck Trips = 1059 + 0.11(# of Daily Trucks on Adjacent Highways)

PASSENGER VEHICLES

AM Peak Hour:

Number of AM Peak Hour Auto Trips = -72.04 + 4.116(# of Auto Fueling Positions) + 2.465(Auto ADT on Adj Hwy / 1,000) - 22.512(# of Adj. Quick Serve Rest) + 94.746(Fast-Food Drive-Through Lane Present, 1 or 0)

PM Peak Hour:

Number of PM Peak Hour Auto Trips = -7.14 + 1.479(# of Auto Fueling Positions) + 2.333(Auto ADT on Adj Hwy / 1,000) - 35.347(# of Adj. Quick Serve Rest) + 109.309(Fast-Food Drive-Through Lane Present, 1 or 0)

Daily:

Number of Daily Auto Trips = -367.39 +52.625(Auto ADT on Adj Hwy / 1,000) – 417.374(# of Adj. Quick Serve Rest) + 1924.569(Fast-Food Drive-Through Lane Present, 1 or 0)

Table B-1: Love's Travel Stop in Williams Trip Generation Data																								
Land Use	6 AM – 8 PM								AM Peak Hour [1]								PM Peak Hour [2]							
	Autos				Trucks				Autos				Trucks				Autos				Trucks			
	Day 1		Day 2		Day 1		Day 2		Day 1		Day 2		Day 1		Day 2		Day 1		Day 2		Day 1		Day 2	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Love's in Williams	1,118	1,108	1,265	1,256	604	625	610	635	49	51	78	67	52	63	42	61	112	107	114	121	43	40	51	37

Notes:
[1] On Day 1, AM peak hour occurred from 8 to 9 AM. On Day 2, AM peak hour occurred from 7:45 -8:45 AM.
[2] On Day 1, PM peak hour occurred from 3 to 4 PM. On Day 2, PM peak hour occurred from 4:15 – 5:15 PM.
Day 1 was Wednesday, June 26, 2024. Day 2 was Thursday, June 27, 2024.
Source: Fehr & Peers, 2024.

Table B-2: Love's Travel Stop in Williams Extrapolated Average Daily Trip Generation																				
Land Use	6 AM – 8 PM								Daily								Averaged Daily			
	Autos				Trucks				Autos				Trucks [1]				Autos		Trucks	
	Day 1		Day 2		Day 1		Day 2		Day 1		Day 2		Day 1		Day 2					
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Love's in Williams	1,118	1,108	1,265	1,256	604	625	610	635	1,235	1,224	1,398	1,388	842	872	851	886	1,317	1,306	847	879

Notes:
[1] 6 AM to 8 PM is 71.7% of daily traffic for truck stops according to the ITE *Trip Generation Manual*. Extrapolation to daily conditions based on this value.
[2] 6 AM to 8 PM is 96% of daily traffic for fast food restaurants with a drive through window and 85% for convenience market with gas station according to the ITE *Trip Generation Manual*. Extrapolation to daily conditions based on the average of those percentages.
Day 1 was Wednesday, June 26, 2024. Day 2 was Thursday, June 27, 2024.
Source: Fehr & Peers, 2024.

Table B-3: Correlation of Variables and Regression Model Equations based Love's Truck Stop Traffic Count Database – Truck Trips						
Metric	**Coefficient of Correlation between Truck Trips Generated and Project Site Truck Attributes [1]**				**Regression Models**	**R-Squared Value [3]**
	AM (PM) [Daily]					
	Truck [2] Fuel Positions	**Truck Parking Spaces**	**Daily Trucks [2] on Adjacent Highways**	**#of Adj. Truck Stops**		
Truck Trip Component of Love's Traffic Count Database	0.08 (0.18) [-.04]	0.16 (0.05) [-0.09]	0.45 (0.67) [0.62]	-0.34 (0.06) [-0.07]	AM Peak Hour: Number of Truck Trips = 60.4 + 0.0069 (Number of Daily Trucks on Adjacent Highways) -15.74 (# of Adjacent Truck Stops)	0.60
					PM Peak Hour: Number of Truck Trips = 44.1 + + 0.0061(# of Daily Trucks on Adjacent Highways)	0.45
					Daily: Number of Daily Truck Trips = 1059 + 0.11(# of Daily Trucks on Adjacent Highways)	0.38

Notes:

[1] Refer to previous page for description of correlation coefficient.

[2] The number of truck fueling positions showed moderately strong positive correlation (about 0.48) with daily trucks on adjacent highways under all scenarios. This would seem to be expected as it is likely that the number of trucks on the adjacent roadway was considered when d deciding upon whhow many truck CFPs to provide.

[3] The R^2 value is a goodness-of-fit measure of the model's ability to predict the actual independent variable values. High R^2 values indicate a strong goodness of fit and vice versa.

Source: Fehr & Peers, 2025.

Table B-4: Correlation of Variables and Regression Model Equations based Love's Travel Stops Traffic Count Database – Auto Trips								
Metric	**Coefficient of Correlation between Auto Trips Generated and Project Site Truck Attributes**					**Regression Models**	**Model Accuracy [1]**	
	AM (PM)[Daily]							
	Auto Fuel Positions	**Restaurant Have Drive-Through?**	**Daily Autos on Adjacent Highways**	**Building Size**	**#of Adj. Quick Serve Rest**		**R^2**	**Other**
Auto Trip Component of Love's Traffic Count Database	0.55 (0.49) [0.48]	0.28 (0.31) [0.36]	0.56 (0.46) [0.55]	0.29 (0.59) [0.32]	-0.74 (-0.83) [-0.70]	<u>AM Peak Hour:</u> Number of AM Peak Hour Auto Trips = -72.04 + 4.116(# of Auto Fueling Positions) + 2.465(Auto ADT on Adj Hwy / 1,000) - 22.512(# of Adj. Quick Serve Rest) + 94.746(Fast-Food Drive-Through Lane Present, 1 or 0)	0.92	5 of 7 observations have predicted values within 9% of actual. The remaining two are each within 14%
						<u>PM Peak Hour:</u> Number of PM Peak Hour Auto Trips = -7.14 + 1.479(# of Auto Fueling Positions) + 2.333(Auto ADT on Adj Hwy / 1,000) - 35.347(# of Adj. Quick Serve Rest) + 109.309(Fast-Food Drive-Through Lane Present, 1 or 0)	0.97	5 of 7 observations have predicted values within 5% of actuals. The remaining two are within 14% and 21%.
						<u>Daily:</u> Number of Daily Auto Trips = -367.39 +52.625(Auto ADT on Adj Hwy / 1,000) – 417.374(# of Adj. Quick Serve Rest) + 1924.569(Fast-Food Drive-Through Lane Present, 1 or 0)	0.96	4 of 7 observations have predicted values within 6% of actuals. The remaining three are within 12%, 12%, and 20%.

Notes:

[1] Because this derivation of the auto trips models necessarily involves the use of more explanatory variables than the truck trips models, the resulting R values should be viewed with some caution because they are a function of the 'degrees of freedom' which is reduced as more variables are added. The Adjusted R-squared value, which takes this into effect, shows values ranging from 0.75 to 0.92.

Source: Fehr & Peers, 2024.

Appendix C: Existing Plus Project Conditions Technical Calculations

Intersection: 1: SR 36 & Sklyline Road/Skyline Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	LT	R	L	T	R	L	T	R
Maximum Queue (ft)	176	95	110	21	190	336	58	22	255	83
Average Queue (ft)	66	33	36	3	64	154	20	1	117	33
95th Queue (ft)	136	78	87	14	137	278	46	11	209	76
Link Distance (ft)		724	1953			1654			1796	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	600			275	300		495	310		300
Storage Blk Time (%)						1			0	
Queuing Penalty (veh)						1			0	

Intersection: 1: SR 36 & Sklyline Road/Skyline Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	LT	R	L	T	R	L	T	R
Maximum Queue (ft)	154	125	125	15	166	286	53	81	514	267
Average Queue (ft)	56	43	40	1	55	124	12	9	237	45
95th Queue (ft)	122	96	91	7	123	231	39	64	432	176
Link Distance (ft)		724	1953			1654			1796	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	600			275	300		495	310		300
Storage Blk Time (%)						0			5	
Queuing Penalty (veh)						0			4	

Intersection: 1: SR 36 & Sklyline Road/Skyline Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T	R
Maximum Queue (ft)	197	89	95	67	234	364	51	16	232	76
Average Queue (ft)	64	32	31	12	67	136	20	1	102	29
95th Queue (ft)	146	76	71	44	152	265	44	7	191	72
Link Distance (ft)		724		1952		1654			1796	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	600		275		300		495	310		300
Storage Blk Time (%)						1			0	
Queuing Penalty (veh)						1			0	

Intersection: 1: SR 36 & Sklyline Road/Skyline Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	T	R
Maximum Queue (ft)	148	132	101	61	162	247	53	26	438	202
Average Queue (ft)	54	46	34	10	55	112	13	4	201	42
95th Queue (ft)	115	103	76	39	125	209	40	17	389	150
Link Distance (ft)		724		1952		1654			1796	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	600		275		300		495	310		300
Storage Blk Time (%)						0			3	
Queuing Penalty (veh)						0			2	

Appendix J

Susanville Sanitary District Letter

SUSANVILLE SANITARY DISTRICT

45 South Roop Street • Susanville, CA 96130 • (530) 257-5665

December 16, 2024

Dan Newton
City Manager
City of Susanville
66 North Lassen Street
Susanville, CA 96130

Mr. Newton

Thank you for visiting the Susanville Sanitary District to discuss the Love's Travel Stop Project at our December 10th board meeting. I want to respond to your requests on behalf of the district board and management. Let this letter serve as an official response.

We first offer a Statement of Intent. The district will own and operate the Sewer Main Line serving the Love's Travel Stop. We understand this is within a Caltrans right-of-way and may include approval for hanging the sewer pipe on the Caltrans bridge.

Secondly, we ask the City of Susanville to submit a joint annexation application to LAFCO. The board has agreed to jointly annex with the City of Susanville on this Love's project.

We appreciate your time and effort in this matter.

Sincerely,

Steve J. Stump
General Manager SSD

Board President Kim Erb
Vice President Marty Heath

Boardmember Danny Choo
Boardmember Billy Hoffman
Boardmember David Martin

www.susanvillesanitarydistrict.com