Initial Study

Sunny Truck Service Center Project

May 2019

Lead Agency:



City of Orland 815 Fourth Street Orland, California 95963

Prepared by:



55 Hanover Lane Suite A Chico, California 95973



INITIAL STUDY SUNNY TRUCK SERVICE CENTER PROJECT

Lead Agency: City of Orland

Project Proponent: Yadwinder Sohal

Project Location: The ± 4.98 acre Project site is located at the southwest corner of the

County Road 13/ County Road HH intersection in unincorporated Glenn

County adjacent to the City of Orland, California.

The Project site corresponds to a portion of Section 21, Township 22 North, and Range 3 West (Mount Diablo Base and Meridian) of the

"Orland, California" 7.5-minute quadrangle (U.S. Geological Survey [USGS]

1958, photo revised 1978) (*Figure 1. Regional Location and Figure 2. Project Location*). The approximate center of the Project site is located at latitude 39.445638° and longitude -122.123424°. The Project site is situated at approximately 260 feet above mean sea level (AMSL).

Project Description: The Project includes a prezoning, a General Plan Amendment, annexation,

site plan, and a lot line adjustment involving five parcels. Development of the Project as proposed would also require the annexation of five existing

parcels by the City (APNs 045-170-018, 019, 020, 021, and 024). The Proposed Project also includes the construction of a 11,800 square foot truck service center on a 2.13 acre lot. A 0.74 acre area is set aside to the north of the proposed truck service center for potential future commercial development. Parcels APN 045-170-021 and 045-170-024 are not a part of the proposed truck service center project but are directly adjacent to

the south and a logical annexation would include these parcels. No

construction is planned for these parcels at this time.

Public Review Period: To be determined

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ACRONYMS AND ABBREVIATIONS

AMSL Above mean sea level
AQAP Air Quality Attainment Plan
BMPs Best Management Practices

CalRecycle California Department of Resources Recycling and Recovery

Caltrans California Department of Transportation

CARB California Air Resources Board

CDFW California Department of Fish and Wildlife
CEQA California Environmental Quality Act

CGS California Geological Society

CH₄ Methane

CO Carbon Monoxide CO₂ Carbon Dioxide

CO₂e Carbon Dioxide Equivalent dBA A-weighted decibels

DEIR Draft Environmental Impact Report
DOC California Department of Conservation
DOE California Department of Education
California Department of Finance

DTSC Department of Toxic Substances Control
ECHO Enforcement and Compliance History Online

EIR Environmental Impact Report

FEMA Federal Emergency Management Agency
GCAPCD Glenn County Air Pollution Control District

GHG Greenhouse Gas

GICIMA Groundwater Information Center Interactive Map Application

gpm Gallons per minute mgd Million gallons per day

MND Mitigated Negative Declaration

MRZ Mineral Resource Zones

N₂O Nitrous Oxide

NAHC Native American Heritage Commission

NO_x Nitrogen Oxides

NRCS Natural Resources Conservation Service
NSVAB Northern Sacramento Valley Air Basin
NSVPA North Sacramento Valley Planning Area

OPD Orland Police Department
OUSD Orland Unified School District
OVFD Orland Volunteer Fire Department

PM₁₀ and PM_{2.5} Particulate Matter PRC Public Resources Code

ACRONYMS AND ABBREVIATIONS

R-1 Residential One-Family Zone

R-3 Residential Multiple Family – Professional Zone

ROG Reactive Organic Gases

RWQCB Regional Water Quality Control Board
USACE United States Army Corps of Engineers
SGMA Sustainable Groundwater Management Act

SIP State Implementation Plan

SO₂ Sulfur dioxide

SWPPP Stormwater Pollution Prevention Plan
SWRCB State Water Resources Control Board
UCMP California Museum of Paleontology
USEPA Environmental Protection Agency
USFWS U.S. Fish and Wildlife Service (
USGS United States Geological Service

SECTION 1.0 BACKGROUND

Summary

Project Title: Sunny Truck Service Center Project

Lead Agency Name and Address: City of Orland

815 Fourth Street

Orland, California 95963

Contact Person and Phone Number: Scott Friend, City Planner

(530) 865-1608

Project Location:

The ± 4.98 acres Project site is located at the southwest

corner of the County Road 13/ County Road HH

intersection in unincorporated Glenn County adjacent to

the City of Orland, California.

The Project site corresponds to a portion of Section 21, Township 22 North, and Range 3 West (Mount Diablo Base and Meridian) of the "Orland, California" 7.5-minute quadrangle (U.S. Geological Survey [USGS] 1958, photo revised 1978) (*Figure 1. Project Location and Vicinity*). The approximate center of the Project site is located at latitude 39.445638° and longitude -122.123424°. The Project site is situated at approximately 261 to 266 feet above mean sea

level (AMSL).

General Plan Designation: Orland: Existing: Low Density Residential, High Density

Residential. Proposed: Commercial **Glenn County:** Service Commercial

Zoning: Orland: Prezone request: C-H (Highway Commercial) and

C-2 (Community Commercial)

Glenn County: SC (Service Commercial)

1.1 Introduction

The Initial Study has been prepared to identify and assess the anticipated environmental impacts of the Sunny Truck Service Center Project (Project or Proposed Project). The City of Orland is the Lead Agency for this Initial Study.

This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (PRC, § 21000 et seq.) and State CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of

Projects over which they have discretionary authority before acting on those Projects. A CEQA Initial Study is generally used to determine which CEQA document is appropriate for a Project (Negative Declaration, Mitigated Negative Declaration [MND], or Environmental Impact Report [EIR]).

1.2 Project Location

The \pm 4.98-acre Project site is located at the southwest corner of the County Road 13/ County Road HH intersection in unincorporated Glenn County adjacent to the City of Orland, California.

The Project site corresponds to a portion of Section 23, Township 22 North, and Range 3 West (Mount Diablo Base and Meridian) of the "Orland, California" 7.5-minute quadrangle (U.S. Geological Survey [USGS] 1958, photo revised 1978) (see *Figure 1. Regional Location and Figure 2. Project Location*). The approximate center of the Project site is located at latitude 39.445638° and longitude -122.123424°. The Project is located on five parcels including the following:

Accessor's Parcel Numbers					
045-170-018	045-170-020	045-170-024			
045-170-019	045-170-021				

1.3 Environmental Setting and Surrounding Land Uses

The Proposed Project site is directly adjacent to the City of Orland's western boundary. The site is located within the northern Sacramento Valley in an area predominately occupied by agricultural and rural residential uses. However, this is an evolving area. There are commercial, industrial uses, and more dense residential uses within close proximity of the Project site. For example, the site is directly adjacent diagonally to the recently constructed Pilot/Flying J commercial center which includes a truck fueling station, an auto fueling station, restaurants and a convenience mini market. Additionally, less than a ¼ mile are two mobile home parks. Finally, the area directly north of the project site is zoned for commercial use and has been approved for the development of a hotel and restaurant by the City.

The Project site is relatively flat, with elevations ranging from 261 - 266 feet above mean sea level (AMSL) over the 4.98 acre site. No natural water ways such as rivers or creeks exist on the Project site. The site has a number of small and medium size trees, three single family homes, a wooden barn, a steel storage building, and a small storage shed.

Adjacent uses include vacant land, the industrial uses of Hardwood Creations, rural residential, and Interstate 5 (I-5) to the east, a trailer sales commercial lot, agricultural uses and rural residential to the south, agricultural uses and rural residential to the west and the Pilot/Flying J truck stop, agricultural uses and vacant land to the north. See *Figure 3. Surrounding Uses*. The nearest home is directly adjacent to the Project's western boundary. Other residential uses are located approximately 425 to 450 feet of the Project site.

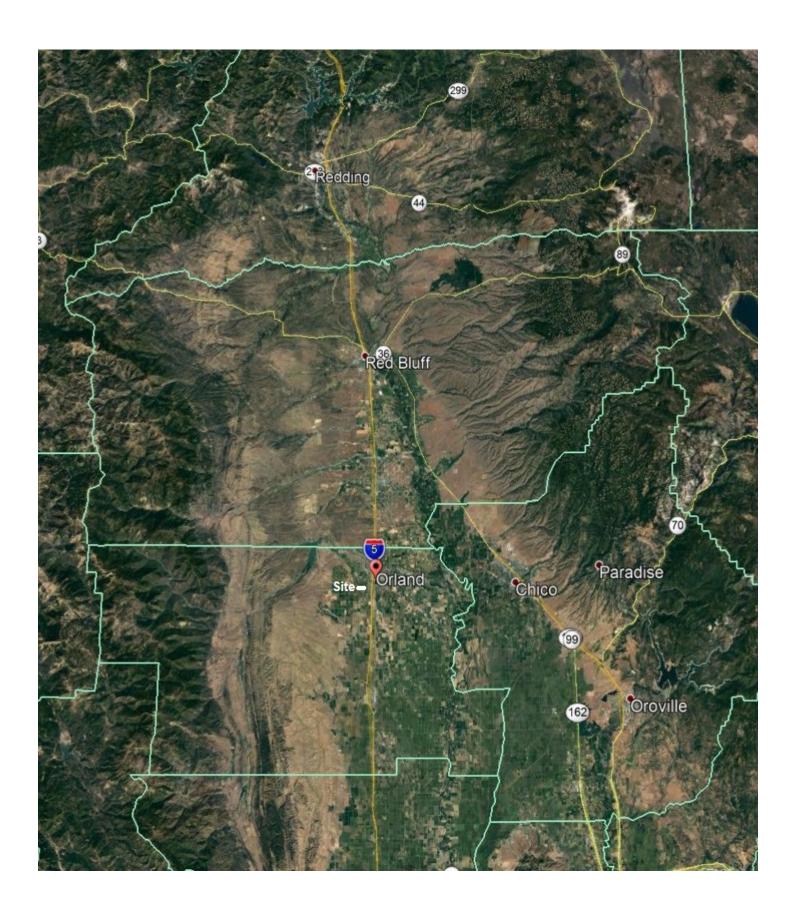




Figure 1. Regional Location Sunny Truck Service Center Project

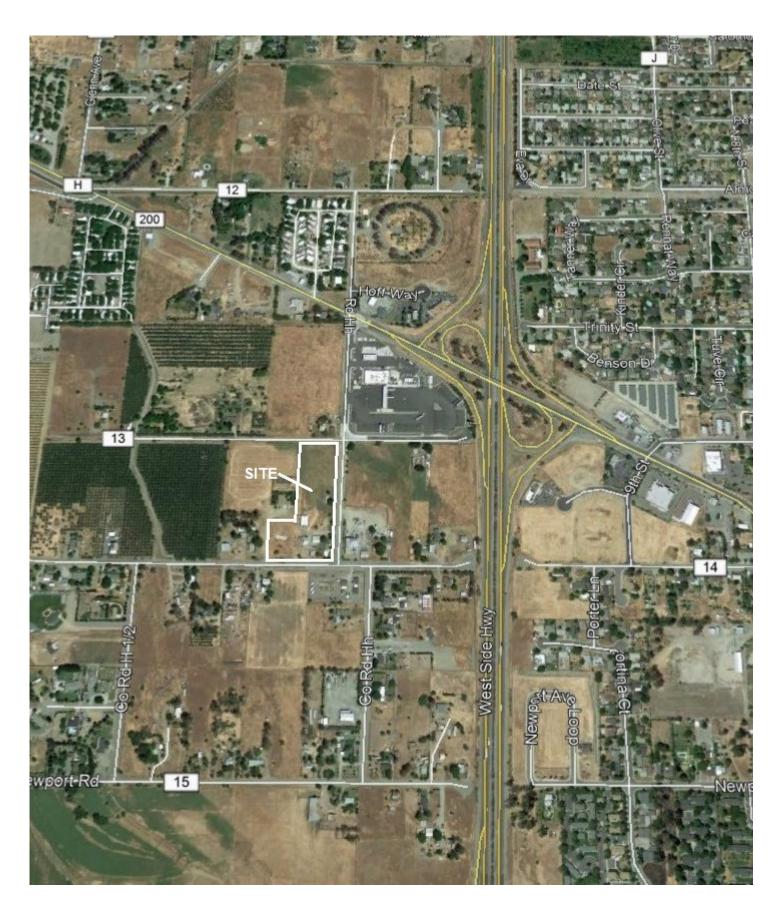




Figure 2. Project Location Sunny Truck Service Center Project



SECTION 2.0 PROJECT DESCRIPTION

2.1 Project Characteristics

The Project includes a General Plan Amendment, a Prezoning, Lot Line Adjustment, and an Annexation by the City and approval of a site plan for five parcels currently within Glenn County jurisdiction. Current and proposed land use designations for the five parcels are listed below. See *Figure 4. Proposed Prezoning*.

Table 2.1-1. Parcel Land Use

	Existing	General Plan	General Plan Des	signation (Orland)	Proposed
Parcel APN	Acres	Designation (Glenn County)	Current	Proposed	Prezoning (Orland)
045-170-018	1.19	Service Commercial	High Density Residential	Commercial	C-H
045-170-019	0.95	Service Commercial	High Density Residential	Commercial	C-H
045-170-020	0.93	Service Commercial	High Density Residential	Commercial	C-H
045-170-021	0.99	Service Commercial	High Density Residential	Commercial	C-H
045-170-024	0.92	Service Commercial	Low Density Residential	Commercial	C-2

Notes: C-H = Highway Commercial, C-2 = Community Commercial

While the Project site is currently under the jurisdiction of Glenn County, the site has been previously assigned land use designations in the City's General Plan because it is within the City of Orland General Plan Planning Area. As shown, the current City of Orland General Plan land use designations for the five parcels are either Low Density Residential or High Density Residential and are proposed to be changed to Commercial.

The proposed prezoning of the parcels are Highway Commercial (C-H) or Community Commercial (C-2). Glenn County's current General Plan land use designation for the five parcels is Service Commercial. However, once the Project site is annexed by the City, these land use designations are no longer valid.

Land Use Comparison

Table 2.1-2 Land Use Comparison identifies the existing and proposed land uses and the maximum densities that these uses could yield. As shown, in *Table 2.1-1* above, the existing City of Orland General Plan land use designation for the Project site is Low Density and High Density Residential. Prezoning these land uses as indicated in the General Plan would result in a prezoning of R-1 and R-3. The General Plan identifies the maximum number of dwelling units per acre by use type. For Low Density Residential this density is 6 dwelling units (du) per acre (ac) and 25 du/ac for High Density Residential. Under existing conditions, using these factors and the parcel acreages, the total number of residential units possible for the Project site would be 107, 102 of which would be multifamily units. This land was not counted on to meet the City's 2014-2021 Regional Housing Needs Allocation (RHNA) and therefore rezoning of other land to meet the RHNA is not required.

As discussed above, the Project proposes a land use change. This change would result in prezoning the project site to C-H and C-2. The Orland General Plan also identifies the maximum building coverage for

the Commercial land use at 60 percent per acre. Using these factors, the Proposed Project would have a maximum building square footage of 80,015 square feet as shown in *Table 2.1-2*. Please note however, these maximum square footages do not take into account the area required for parking, site constraints, landscaping, setbacks, development type, and other factors that would limit the potential square footage. The actual square footage would most likely not reach the maximum potential.

Table 2.1-2. Land Use Comparison

Down of ADM	Existing	Existing Potential		Proposed Potential	
Parcel APN	Acres ¹	Prezoning (Max Density/Ac)	Maximum Units	Prezoning (Max Building Coverage/Ac)	Maximum Building Sq. Ft
045-170-018	1.19	R-3 (25 du/ac)	30	C-H (0.72 ac as proposed 60% building coverage)	19,341 sq. ft.
045-170-019	0.95	R-3 (25 du/ac)	24	C-H	11,800 sq. ft.
045-170-020	0.93	R-3 (25 du/ac)	23	(2.13 ac as proposed)	as proposed
045-170-021	0.99	R-3 (25 du/ac)	25	C-H (1.12 ac as proposed) (60% building coverage)	25,613 sq. ft.
045-170-024	0.92	R-1 (6 du/ac)	5	C-2 (60% building coverage)	23,261 sq. ft.
Total	4.98		107		80,015 sq. ft.
				Potential future commercial total ¹	68,215 sq. ft.

Notes: 1) Potential future commercial square footage: 80,015 sq. ft. - the Truck Service Center 11,800 sq. ft. = 68,215 sq. ft.

The Proposed Project includes a Lot Line Adjustment/Merger involving three parcels to merge parcels APNs 045-170-019 and 045-170-020 into one lot and reduce the size of parcel APN 045-170-018. The merged lot will have a resulting size of 2.13 acres and the reduce lot will be reduced from 1.19 acres to 0.74 acres. See *Figure 5*. *Lot Line Adjustment* for the proposed lots.

Proposed Sunny Truck Wash Project

The Proposed Project also includes the construction of a 11,800 square foot truck service center. as well as, a 0.74-acre area set aside for potential future commercial development on three of the five Project parcels. See *Figure 6*. *Site Plan*.

The truck service center portion of the Project will consist of two buildings, wash-water treatment tanks, a paved parking lot including 11 parking spaces, landscaping, a western and southern boundary masonry wall, curbs gutters and sidewalks adjacent to the developed site on County Road 13 and County Road HH, and a trash enclosure.

The service center includes a truck wash building and a tire and oil service building. The truck wash building is an approximately 5,700 square feet, single story building and includes a two bay truck washing facility, three restrooms, office/waiting room, breakroom, and a chemical room. The tire and oil service building is an approximately 6,120 square foot, single story building and includes two service bays, two storage rooms, an employee room, two restrooms, and an office/waiting room. There is also an outdoor

wash station between the two buildings. The outdoor wash station is used to washout the inside of the trailer van (Washout). Washout process requires only the use of water. See *Figure 7*. *Floor Plan*.

Parcels APN 045-170-021 and 045-170-024 are not a part of the proposed Truck Service Center project but are a part of the General Plan Amendment, Prezoning and Annexation. No construction is planned for these parcels at this time.

Employees and Operations

At minimum there will be a total of six employees at the Project site during operation. The hours of operation will be from 6:00 am to 9:00 pm Monday through Friday and 7:00 am to 7:00 pm on Saturday and Sunday.

The number of trucks serviced daily as a part of the oil/tire operation is estimated to be approximately 5 to 10. The number of trucks anticipated to use the truck washing facilities on a daily basis is 20 to 25. Anticipated deliveries to the site are estimated at one per week. These deliveries include approximately 20 to 50 tires and 300 to 500 gallons of oil. There will also be three truck trips per month to remove and dispose of used oil and tires.

Potable water is proposed to be used for the truck wash. A recycled water system is not proposed. The anticipated amount of water used on a daily basis is approximately 1,500 gallons. Additionally, approximately 1,200 gallons per day of wastewater will be produced at the Project.

The truck wash will use soap and rinse chemicals typically used in this type of process. No blower/dryers will be used at the truck wash.

Project Construction Timing

Construction of the Truck Service Center Project is anticipated to begin in the spring of 2020.

2.2 Regulatory Requirements, Permits, and Approvals

The following approvals and regulatory permits would be required for implementation of the Proposed Project.

Lead Agency Approval

As the lead agency, the City of Orland has the ultimate authority for Project approval or denial. The Proposed Project may require the following discretionary approvals and permits by the City for actions proposed as part of the Project:

- Approval of the General Plan Amendment
- Approval of the Prezoning
- Approval of the Annexation
- Approval of the Lot Line Adjustment
- Certification of the Environmental Impact Report

In addition to the above City actions, the Project may require approvals, permits, and entitlements from other public agencies for which this Initial Study may be used, including, without limitation, the following:

- California Department of Fish and Wildlife (CDFW), Region 2
- California Department of Transportation (Caltrans), District 3
- Glenn County Air Pollution Control District (GCAPCD)
- Glenn County Local Agency Formation Commission

2.3 Relationship of Project to Other Plans and Projects

City of Orland General Plan

California state law requires cities and counties to prepare a general plan describing the location and types of desired land uses and other physical attributes in the city or county. General plans are required to address land use, circulation, housing, conservation, open space, noise, and safety. The Orland General Plan is the City's basic planning document and provides a comprehensive, long-term plan for physical development in the city (Orland 2010a).

2.4 Consultation with California Native American Tribe(s)

No California Native American tribes traditionally and culturally affiliated with the Project area have submitted written requests to receive notification of the City of Orland's projects pursuant to PRC § 21080.3.1. Further information on potential Tribal Cultural Resources in the Project area is provided in Section 4.17 of this Initial Study.

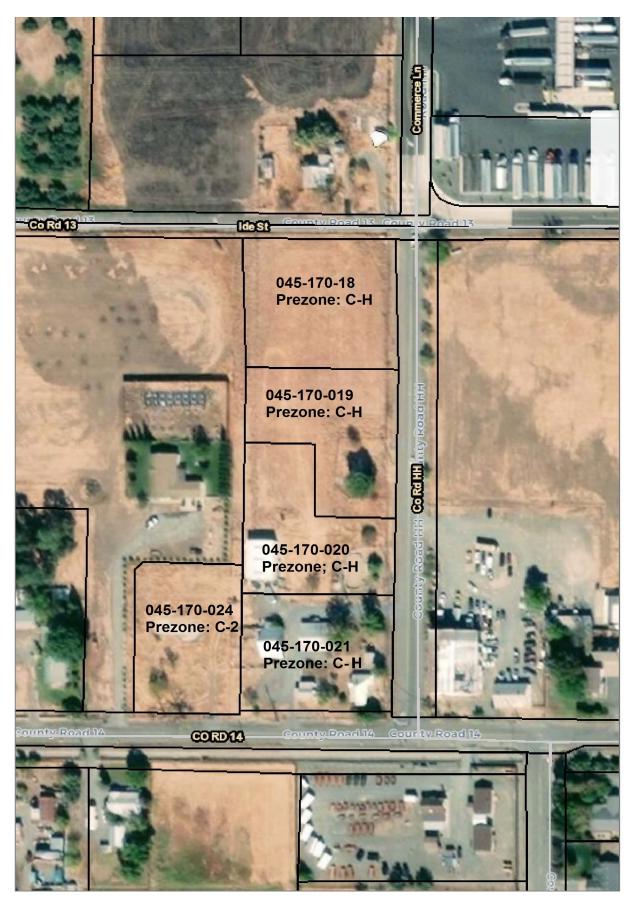
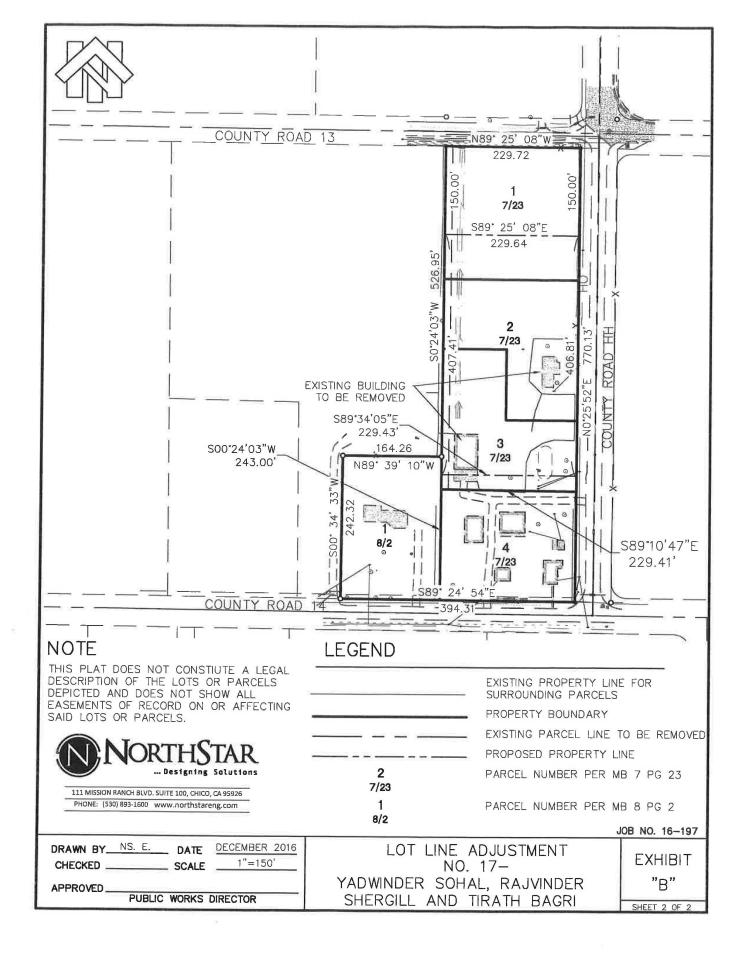
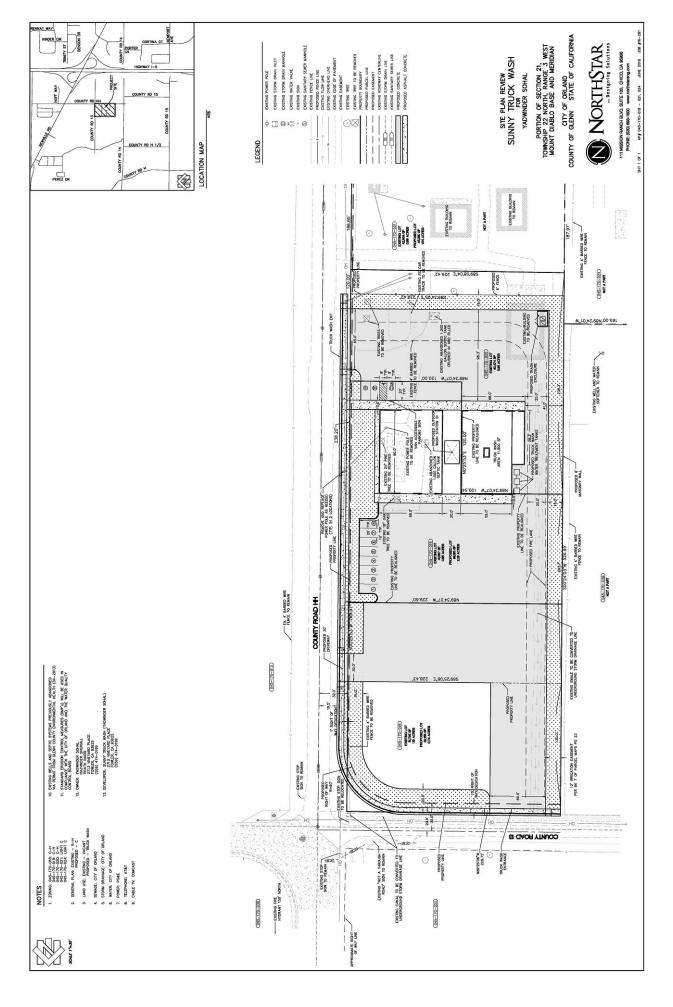


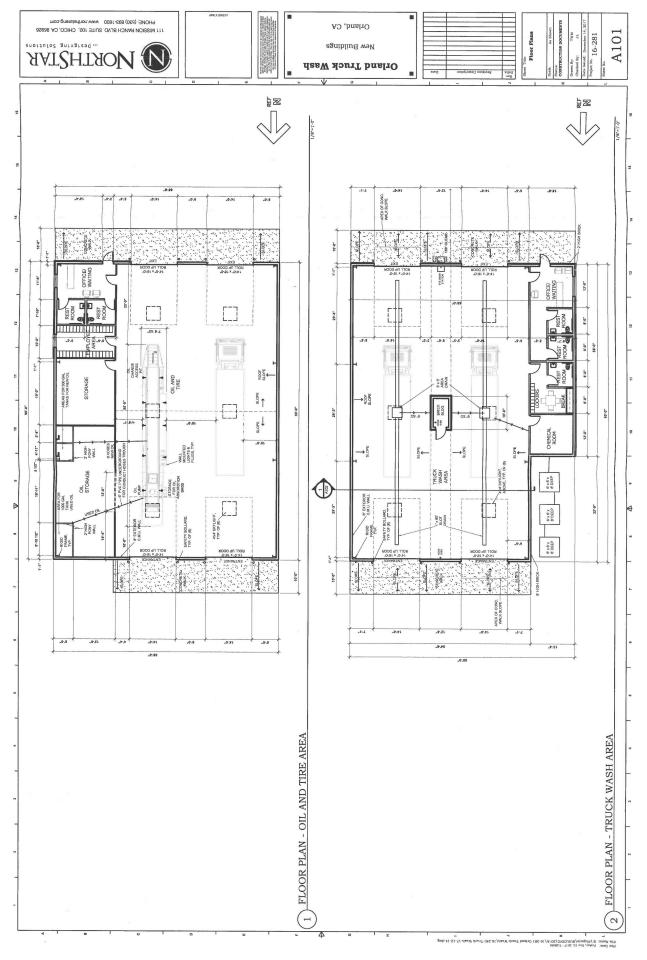


Figure 4. Proposed Prezoning Sunny Truck Service Center Project











SECTION 3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

3.1 Environmental	Factors Potentially Affect	ed	
The environmental factors checked one impact that is a "Potentially Sign			
Aesthetics	Greenhouse Gas Emissions	Public Services	
Agriculture and Forestry Resources	Hazards/Hazardous Materials	Recreation	
	Hydrology/Water Quality		
☑ Biological Resources	Land Use and Planning	☐ Tribal Cultural Resources	
☑ Cultural Resources	Mineral Resources	Utilities and Service Systems	
⊠ Energy	Noise	Wildfire	
Geology and Soils	Population and Housing	Mandatory Findings of Signif	icance
Determination			
On the basis of this initial evaluation I find that the Project COULD NOT DECLARATION will be prepared. I find that although the Project cou be a significant effect in this case b	have a significant effect on the old ald have a significant effect on the ecause revisions in the Project h	ne environment, there will not nave been made by or agreed	
to by the Project proponent. A MIT I find that the Project MAY have a SIMPACT REPORT is required.		·	\boxtimes
I find that the Project MAY have a "mitigated" impact on the environm an earlier document pursuant to apmitigation measures based on the ENVIRONMENTAL IMPACT REPORT be addressed.	ent but at least one effect 1) ha oplicable legal standards, and 2) earlier analysis as described on a	s been adequately analyzed in has been addressed by attached sheets. An	
I find that although the Project cou potentially significant effects (a) ha DECLARATION pursuant to applical pursuant to that earlier EIR or NEG/ measures that are imposed upon th	ve been analyzed adequately in ble standards, and (b) have beer ATIVE DECLARAΠON, including	an earlier EIR or NEGATIVE n avoided or mitigated revisions or mitigation	
Pot flan	5-14.	-19	
Péter(R. Carr () City Manager	Date		

SECTION 4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

4.1 Aesthetics

4.1.1 Environmental Setting

Views available from the Project site include the Coast Range to the west, and on clear days the Cascade and Sierra Nevada mountains and foothills to the east and northeast.

Regional Setting

The City's General Plan Draft Environmental Impact Report (DEIR) (City of Orland 2010b) identifies views of the Coast Range and the Black Butte Recreation Area, Mount Lassen and the Cascade and Sierra mountains, and Stony Creek, as the most significant natural scenic resource within the Planning Area of the City. The General Plan does not include any policies for the protection of views or identify any viewsheds, or scenic vistas that should be protected.

State Scenic Highways

The intent of the California Scenic Highway Program is to protect and enhance the scenic beauty of California's highways and adjacent corridors. A highway can be designated as scenic based on how much natural beauty can be seen by users of the highway, the quality of the scenic landscape, and if development impacts the enjoyment of the view. No officially designated scenic highways are located within the vicinity of the Project site (Caltrans 2018).

Visual Character of the Project Site

The Project site is relatively flat, with elevations ranging from 261 - 266 feet above mean sea level (AMSL) over the 4.98 acre site. No natural water ways such as rivers or creeks exist on the Project site. The site has a number of small and medium size trees, three single family homes, a wooden barn, a steel storage building, and a small storage shed.

4.1.2 Aesthetics (I) Environmental Checklist and Discussion

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	have a substantial adverse effect on a scenic vista?				

While the City's General Plan DEIR identifies views of the Coast Range and the Black Butte Recreation Area, Mount Lassen and the Cascade and Sierra mountains, and Stony Creek, the General Plan does not include any policies for the protection of views or identify any viewsheds, or scenic vistas that should be protected. Distant views of the Coast Range can be seen from the Project site and surrounding area. However, these views are fragmented by existing development and natural features such as trees and hills.

The Orland General Plan does not identify any areas considered to be scenic vistas that need to be protected and preserved in the City. Additionally, the Project site is not considered to be in an area of significant visual qualities, nor do these areas have any significant visual features. The Project would not affect the viewshed or scenic vista of the site. Therefore, The Proposed Project would have no impact on scenic vistas.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
	Proposed Project is not located within the vicinity of anct would occur.	n officially de	esignated scenic	highway. No)
Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	In a non-urbanized area substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				

The Proposed Project site is directly adjacent to the City of Orland's western boundary. There are existing commercial, and industrial uses, and as well as residential uses within close proximity of the Project site. For example, the site is directly adjacent diagonally to the recently constructed Pilot/Flying J commercial center which includes a truck fueling station, an auto fueling station, restaurants and a convenience mini market. Additionally, less than a ¼ mile to the north and west of the Project site are two mobile home parks. Finally, the area directly north of the project site is zoned for commercial use and has been approved for the development of a hotel and restaurant by the City.

The Project site is located within the Orland General Plan Sphere of Influence and identified for urban uses in the General Plan as well as in the Glenn County General Plan. While the Proposed Project would result in a change in use from rural residential to commercial, this change has been considered by the City and County in their General Plans. The construction of a new commercial building may change the visual character from rural residential to commercial. However, this change does not result in a substantial degradation of the Project site as this change supports the future urban uses identified in the General Plans. Additionally, the site is located in a developing urban area. As such, the Proposed Project would

have a less than significant impact to the existing visual character or quality of the site and its surroundings.

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				

No new light or glare sources visible beyond the Project site would be introduced during construction of the Truck Service Center or any future commercial developments. As required by the City, all construction work will be performed during normal daylight construction hours, thereby eliminating any need for temporary light sources necessary for nighttime work.

The proposed Truck Service Center and any future commercial developments may result in a moderate increase of artificial light and glare into the existing environment. Potential sources of light and glare include external building lighting, parking lot lighting, security lighting, building windows, and reflective building materials. The introduction of new sources of light and glare may contribute to nighttime light pollution and result in impacts to nighttime views in the area. However, all future development would be subject to Orland Municipal Code Section 17.44.110, which requires the shielding of lighting to prevent illumination of the adjacent properties and to prevent glare or direct illumination of public streets, limits the height of light poles to the height of the main building, and requires suitable lights to properly illuminate any parking area. As such, the Proposed Project would have a less than significant impact for the potential to create light or glare that would adversely affect day or nighttime views.

4.2 Agriculture and Forestry Resources

4.2.1 Environmental Setting

The California Department of Conservation (DOC) manages the Farmland Mapping and Monitoring Program, which identifies and maps significant farmland. Farmland is classified using a system of five categories including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land. The classification of farmland as Prime Farmland, Unique Farmland, and Farmland of Statewide Importance is based on the suitability of soils for agricultural production, as determined by a soil survey conducted by the Natural Resources Conservation Service (NRCS). The DOC manages an interactive website, the California Important Farmland Finder which can be used to identify the farmland classification of a specific area. This website program identifies the lands in the Project vicinity as being Prime Farmland and Other Land (DOC 2019). Neither the site nor adjacent lands are subject to a Williamson Act contract (DOC 2016). The Project site is not within an area which contains forest or timber resources and is not zoned for forestland protection or timber production.

4.2.2 Agriculture and Forestry Resources (II) Environmental Checklist and Discussion

Wo	uld the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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 nonagricultural use?				
rema Impo Proje	rding to the DOC (2019), approximately 1.8 acres of the ining 3.1 acres are identified as Other Land. Additionation and Unique Farmland are in close proximity to ct has the potential to convert these farmlands into notially significant impact. Therefore, this issue area will	ally, land iden the Proposed on-agricultura	tified as Farmla I project. As suc al use. This wou	and of Statev ch, the Propo Ild be consid	vide osed
Wo	uld the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
	e are no Williamson Act contract lands within the vicind have no impact in this area.	ity of the Pro	ject site (DOC 2	2016). The Pro	oject
Wo	uld the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				\boxtimes

No forest lands exist on the Project site or within the vicinity of the Project. The Project would have no impact in this area.

Woi	uld the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				
	prest lands exist on the Project site or within the vicini	ty of the Proje	ect. The Project	t would have	no
impa	ct in this area.				
impa ———	ct in this area.		Less than Significant		
	ct in this area. uld the project:	Potentially Significant Impact		Less than Significant Impact	No Impact

There are agricultural uses adjacent to the site. The construction of commercial uses and the prezoning of the area for commercial uses may result in a potentially significant impact to the adjacent agricultural uses. As such, this issue area will be analyzed further in the EIR.

4.3 Air Quality

4.3.1 Environmental Setting

The Proposed Project is located in Glenn County, which is in the Northern Sacramento Valley Air Basin (NSVAB). The NSVAB consists of a total of seven counties: Sutter, Yuba, Colusa, Butte, Glenn, Tehama, and Shasta. The NSVAB is bounded on the north and west by the Coastal Mountain Range and on the east by the southern portion of the Cascade Mountain Range and the northern portion of the Sierra Nevada range. These mountain ranges reach heights in excess of 6,000 feet above sea level, with individual peaks rising much higher. The mountains form a substantial physical barrier to locally created pollution as well as that transported northward on prevailing winds from the Sacramento metropolitan area.

Both the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants representing safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The six criteria pollutants are ozone, carbon monoxide (CO), particulate matter (PM), nitrogen oxides (NOx), sulfur dioxide (SO₂), and lead. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. Glenn County has been designated an attainment or unclassified (data insufficient to support any designation) area for

all federal ambient air quality standards (CARB 2017). However, the county is designated a nonattainment area for state particulate matter less than 10 microns (PM_{10}) standards (CARB 2017). The County is designated an attainment or unclassified area for all other state ambient air quality standards (CARB 2017).

The regional air quality regulating authority is the GCAPCD, which monitors air quality in the County and serves as the lead agency responsible for implementing and enforcing federal, state, and County air quality regulations. Air pollution sources in the county include seasonal burning of agricultural fields, dust from agricultural operations, and motor vehicle emissions.

4.3.2 Air Quality (III) Environmental Checklist and Discussion

Woi	uld the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?				

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the California Clean Air Act requires an air quality attainment plan (AQAP) to be prepared for areas designated as nonattainment with regard to the federal and state ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The North Sacramento Valley Planning Area (NSVPA) 2015 Air Quality Attainment Plan (SVBAPCD 2015) is the most recent air quality planning document covering Glenn County. SIPs are a compilation of new and previously submitted plans, programs (such as monitoring, modeling, and permitting), district rules, state regulations, and federal controls describing how the state will attain ambient air quality standards for ozone and particulate matter. State law makes CARB the lead agency for all purposes related to the SIP. Local air districts prepare SIP elements and submit them to CARB for review and approval. The NSVPA 2015 Air Quality Attainment Plan includes forecast reactive organic gases (ROG) and NO_x emissions (ozone precursors) for the entire NSVPA region through the year 2020. These emissions are not appropriated by county or municipality.

Criteria for determining consistency with the 2015 AQAP are defined by the following indicators:

Consistency Criterion No. 1: The Proposed Project would not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQAP.

Consistency Criterion No. 2: The Proposed Project would not exceed the assumptions in the AQAP or increments based on the Project buildout phase.

Since an air quality analysis has not yet been completed for the Proposed Project, it is not possible to determine the impact the Project would have on the 2015 Air Quality Attainment Plan. As such, this is considered a potentially significant impact and will be further discussed in the EIR.

Would the Project:		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant 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?				

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

The Proposed Project could result in the emission of criteria air pollutants during construction and operation. Since an air quality analysis has not yet been completed for the Proposed Project, it is not possible to determine the impact the Project would have on any criteria pollutant. As such, this is considered a potentially significant impact and will be further discussed in the EIR.

Less than Significant Potentially With			Less than		
Wo	ould the Project:	Significant Impact	Mitigation Incorporated	Significant Impact	No Impact
c)	Expose sensitive receptors to substantial pollutant concentrations?				

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. The California Air Resources Board (CARB) has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptor to the Project site is a residence located adjacent to the Project site.

The Proposed Project could result in the emission of criteria air pollutants during construction and operation. Since an air quality analysis has not yet been completed for the Proposed Project, it is not

possible to determine the impact the Project would have on sensitive receptors. As such, this is considered a potentially significant impact and will be further discussed in the EIR.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

The Proposed Project could result in emissions causing unpleasant odors during construction and operation. As such, this is considered a potentially significant impact and will be further discussed in the EIR.

4.4 Biological Resources

4.4.1 Environmental Setting

The US Fish and Wildlife Service (USFWS), CDFW, and California Native Plant Society (CNPS) document species that may be rare, threatened, or endangered. Federally listed species are fully protected under the mandates of the federal Endangered Species Act (ESA). "Take" of listed species incidental to otherwise lawful activity may be authorized by either the USFWS or the National Marine Fisheries Service (NMFS), depending on the species.

Under the California Endangered Species Act (CESA), the CDFW has the responsibility for maintaining a list of threatened and endangered species. The CDFW also maintains lists of "candidate species" and "species of special concern," which serve as "watch lists." State-listed species are fully protected under the mandates of the CESA. Take of protected species incidental to otherwise lawful management activities may be authorized under Section 2081 of the California Fish and Game Code.

Under Section 3503.5 of the California Fish and Game Code, it is unlawful to take, possess, or destroy any birds in the orders of Falconiformes or Strigiformes (raptors) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

The Native Plant Protection Act (California Fish and Game Code Sections 1900-1913) prohibits the take, possession, or sale within the state of any rare, threatened, or endangered plants as defined by the CDFW. Project impacts on these species would not be considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with the project.

4.4.2 Biological Resources (IV) Environmental Checklist and Discussion

Wou	ld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact		
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (USFWS)?						
	The Project site has not yet been evaluated for the potential to affect candidate, sensitive, or special status species. This will occur as a part of the EIR.						
Wou	ld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact		
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or USFWS?						
	oject site has not yet been evaluated for the potentia ve natural community. This will occur as a part of the		ny riparian habita	at or other			
Wou	ld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact		
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.)						

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
	through direct removal, filling, hydrological interruption, or other means?	impuet	ncorporateu	impuet	Impact
The F	Project site has not yet been evaluated for the potenti IR.	al to affect w	etlands. This will	occur as a	part of
Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No 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?				
	Project site has not yet been evaluated for the potenti dors, or impede the use of native wildlife nursery sites			-	vildlife
Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
	e are currently no adopted or proposed local policies efore, no impact would occur.	or ordinance	s that affect the	Proposed Pi	roject.
Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?				
There	e are no adopted habitat conservation plans, natural c	ommunity co	onservation plan	s, or any add	opted

biological resources recovery or conservation plans in the Proposed Project area. As such, no impact would occur.

4.5 Cultural Resources

The Project area is located within what is historically documented as Central Wintun (Nomlaki) territory. There were two major divisions of Nomlaki Indians in California: the Hill Nomlaki and the River Nomlaki. The Hill Nomlaki are identified as the Paskenta Band of Nomlaki Indians. It is this group that has ancestral ties to the Orland area, which includes the Project area. Euro-American contact with Native American groups living in the Central Valley of California began during the last half of the eighteenth century. At this time, the attention of Spanish missionaries shifted away from the coast, and its dwindling Native American population, to the conversion and missionization of interior populations.

Following Euro-American contact, the land was bought to farm; the advent of a canal system and a railroad hub nearby made the land particularly attractive. The population of California was growing and food producers were needed. The Orland area was particularly suited for fruit and nut trees. At the turn of the previous century, alfalfa, sugar beets, and grains were the more common crops produced in the irrigated fields in the area.

4.5.1 Cultural Resources (V) Environmental Checklist and Discussion

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				
N 1	t	- D	Al +l :		£
the P	tural resources survey has not been completed for the roject to impact historical resources on the on the sit determined at this time. As such, this will be discussed	e. The extent		•	
the Poeen	roject to impact historical resources on the on the sit	e. The extent		•	

A cultural resources survey has not been completed for the Project site. As such, there is a potential for the Project to impact archaeological resources on the on the site. The extent of this potential impact has not been determined at this time. As such, this will be discussed in the EIR.

Woi	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?				

A cultural resources survey has not been completed for the Project site. As such, there is a potential for the Project to impact any possible human remains on the on the site. The extent of this potential impact has not been determined at this time. As such, this will be discussed in the EIR.

4.6 Energy

4.6.1 Environmental Setting

Introduction

Energy consumption is analyzed in this Initial Study due to the potential direct and indirect environmental impacts associated with the Project. Such impacts include the depletion of nonrenewable resources (oil, natural gas, coal, etc.) and emissions of pollutants during both the construction and long-term operational phases.

Electricity/Natural Gas Services

Pacific Gas and Electric (PG&E) provides electrical services to the Project area through state-regulated public utility contracts. PG&E's ability to provide its services concurrently for each project is evaluated during the development review process. The utility company is bound by contract to update its systems to meet any additional demand.

Energy Consumption

Electricity use is measured in kilowatt-hours (kWh), and natural gas use is measured in therms. Vehicle fuel use is typically measured in gallons (e.g. of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh.

The California Energy Commission tracks the amount of electricity and natural gas consumed in California by county. The electricity and natural gas consumption in Glenn County from 2013 to 2017 is shown in *Table 4.6-1*. As indicated, the demand has increased since 2013 for both electricity and natural gas.

Table 4.6-1. Non-Residential Electricity and Natural Gas Consumption in Glenn County 2013-2017

Year	Non-Residential Electricity Consumption (kilowatt hours)	Non-Residential Natural Gas Consumption (Therms)
2017	293,741,753	6,087,432
2016	276,414,306	5,838,224
2015	294,464,463	6,159,485

Year	Non-Residential Electricity Consumption (kilowatt hours)	Non-Residential Natural Gas Consumption (Therms)
2014	291,473,564	5,767,873
2013	257,911,754	5,434,354

Source: CEC 2019

Automotive fuel and diesel consumption in Glenn County from 2014 to 2018 is shown in *Table 4.6-2*. As shown, fuel consumption has fluctuated in the county since 2014.

Table 4.6-2. Automotive Fuel Consumption in Glenn County 2014-2018

Year	On-Road Fuel Consumption (gallons)		
	Gasoline	Diesel	
2018	29,678,487	9,867,643	
2017	30,450,920	9,904,870	
2016	30,508,997	9,920,412	
2015	29,828,712	9,433,824	
2014	29,438,106	9,169,560	

Source: CARB 2017

4.6.2 Energy (VI) Environmental Checklist and Discussion

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				

The impact analysis focuses on the three sources of energy that are relevant to the Proposed Project: electricity, the equipment fuels necessary for Project construction, and the automotive and diesel fuel used during Project operations. The amount of energy necessary to construct and operate the Project and whether or not it is a wasteful, inefficient, or unnecessary consumption of energy resources has not been determined and as such this area will be further discussed in the EIR.

Woi	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				

The City of Orland does not have a plan for renewable energy or energy efficiency. As discussed in under Item a), the amount of energy necessary to construct and operate the Project and whether or not it is a wasteful, inefficient, or unnecessary consumption of energy resources has not been determined. How this will affect a state plan for renewable energy or energy efficiency has also not been determined at this time. For these reasons, this area will be further discussed in the EIR.

4.7 Geology and Soils

4.7.1 Environmental Setting

Geomorphic Setting

The Project site is located in the north-central portion of the Great Valley geomorphic province of California. The Great Valley province is an alluvial plain about 50 miles wide and 400 miles long in the central part of California. Its northern part is the Sacramento Valley, drained by the Sacramento River and its southern part is the San Joaquin Valley drained by the San Joaquin River. The Great Valley is a trough in which sediments have been deposited almost continuously since the Jurassic Period (about 160 million years ago). Great oil fields have been found in southernmost San Joaquin Valley and along anticlinal uplifts on its southwestern margin. In the Sacramento Valley, the Sutter Buttes, the remnants of an isolated Pliocene volcano, rise above the valley floor (CGS 2002).

Site Geology

The geology of the Sacramento Valley as a large, asymmetric, structural trough (syncline) formed by westward-tilting blocks of plutonic and metamorphic rocks on the eastern side, and highly folded and faulted blocks of metamorphic rocks (Franciscan) on the western side. This basin has been partially filled by a thick sequence (up to 12.4 miles [20km] thick) of sedimentary rocks and alluvial deposits that range from late Jurassic to Historical in age. During the Pleistocene, erosion of the Sierra Nevada led to the deposition of large alluvial fans at the base of the foothills along the eastern side of the Sacramento Valley. Glacial conditions are generally credited for the deposition of these fans, while subsequent interglacial periods are marked by landscape stability, soil formation, and channel incision. Subsequent depositional cycles during the Holocene progressively buried downstream sections of many older alluvial fans and also led to the formation of inset stream terraces and nested alluvial fans along the foothills (Rosenthal and Willis 2017).

About 4,000 years ago, most of Sacramento Valley had large amounts of alluvium deposited across it, forming a continuous plain extending from southern Glenn County through Yolo County in the west, and from northern Butte County to Sutter County in the east. Along modern streams and rivers in the lower Sacramento Valley, these late Holocene deposits were in part eventually eroded and/or buried by the

Latest Holocene and historic period soil deposits. These latest Holocene deposits often bury older archaeological deposits (Rosenthal and Willis 2017).

Site Soils

According to the NRCS Web Soil Survey website (NRCS 2019), two soil units, or types, have been mapped within the Project site as shown in *Table 4.7-1* below. These are: (CzT) Cortina very gravelly sandy loam, moderately deep and (Wg) Wyo loam, deep over gravel. Among many soil related attributes, the Web Soil Survey identifies drainage, flooding, erosion, runoff, and the linear extensibility potential for the Project soils. According to this survey, the Project is predominately underlain by soils that are somewhat excessively drained to well-drained and have a low to moderate runoff potential. The Project site soils have a slight erosion potential and a low linear extensibility (shrink-swell) (NRCS 2019).

Table 4.7-1. Project Area Soil Characteristics

Soil	Percentage of Site	Drainage	Flooding Frequency Class	Erosion Hazard ¹	Runoff Potential ²	Linear Extensibility (Rating) ³	Frost Action ⁴
Cortina very gravelly sandy loam, moderately deep	40.1%	Somewhat excessively drained	Occasional	Slight	A (Low)	1.5%	None
Wyo loam, deep over gravel	59.9%	Well drained	None	Slight	B (Moderate)	1.5%	None

Source: NRCS 2019 Notes:

- 1. The hazard is described as "slight," "moderate," "severe," or "very severe." A rating of "slight" indicates that erosion is unlikely under ordinary climatic conditions; "moderate" indicates that some erosion is likely and that erosion-control measures may be needed; "severe" indicates that erosion is very likely and that erosion-control measures, including revegetation of bare areas, are advised; and "very severe" indicates that significant erosion is expected, loss of soil productivity and offsite damage are likely, and erosion-control measures are costly and generally impractical.
- 2. Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation. Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. Group B. Soils having a moderate infiltration rate when thoroughly wet. Group C. Soils having a slow infiltration rate when thoroughly wet. Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet.
- 3. Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent, moderate if 3 to 6 percent, high if 6 to 9 percent, and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.
- 4. Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Regional Seismicity and Fault Zones

In California, special definitions for active faults were devised to implement the Alquist-Priolo Earthquake Fault Zoning Act of 1972, which regulates development and construction in order to avoid the hazard of surface fault rupture. The State Mining and Geology Board established policies and criteria in accordance with the act, which defined an active fault as one which has had surface displacement within Holocene time (about the last 11,000 years). A potentially active fault was considered to be any fault that showed evidence of surface displacement during Quaternary time (last 1.6 million years). Because of the large number of potentially active faults in California, the State Geologist adopted additional definitions and criteria to limit zoning to only those faults with a relatively high potential for surface rupture. Thus, the

term "sufficiently active" was defined as a fault for which there was evidence of Holocene surface displacement. This term was used in conjunction with the term "well-defined," which relates to the ability to locate a Holocene fault as a surface or near-surface feature (CGS 2010).

According to the Orland General Plan Update EIR (Orland 2010b), the primary seismic hazard associated with the Orland planning area is minor ground shaking. The Project site is not located within an Alquist-Priolo earthquake hazard zone. The closest active fault system is the 40-mile-long Willows fault, located about 10 miles west of Orland.

Paleontological Resources

A paleontological records search was requested from the University of California Museum of Paleontology (UCMP) on February 22, 2019. The search included a review of the institution's paleontology specimen collection records for Glenn County, including the Project area and vicinity. The purpose of the assessment was to determine the sensitivity of the Project area, whether known occurrences of paleontological resources are present within or immediately adjacent to the Project area, and whether implementation of the Project could result in significant impacts to paleontological resources. Paleontological resources include mineralized (fossilized) or un-mineralized bones, teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains.

The results of the search of the UCMP indicated that 239 paleontological specimens were recorded from 27 identified localities and 76 unidentified localities in Glenn County. Paleontological resources include fossilized remains of birds, mammals, reptiles and amphibians. No paleontological resources have been previously recorded within or near the Proposed Project site (UCMP 2019).

4.7.2 Geology and Soils (VI) Environmental Checklist and Discussion

Wo	uld ti	he Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	sub	pose people or structures to potential ostantial adverse effects, including the risk of s, injury, or death involving:				
	i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
	ii)	Strong seismic ground shaking?			\boxtimes	
	iii)	Seismic-related ground failure, including liquefaction?				
	iv)	Landslides?				\boxtimes

- The Proposed Project site is not located within an Alquist-Priolo Earthquake Zone (CGS 2010, 2015). There would be no impact related to fault rupture.
- ii) According to CGS's Earthquake Shaking Potential for California mapping, the Proposed Project site is located in an area which is distant from known, active faults and will experience lower levels of ground-shaking less frequently. In most earthquakes, only weaker masonry buildings would be damaged. However, very infrequent earthquakes could still cause strong shaking in the area (CGS 2016). The Proposed Project includes the development of a truck service center. The truck wash would be required to comply with the City of Orland Improvement Standards, including any required seismic mitigation standards. Because of the required compliance and the distance from active faults, the Proposed Project would have a less than significant impact related to strong ground shaking.
- iii) Liquefaction occurs when loose sand and silt that is saturated with water behaves like a liquid when shaken by an earthquake. Liquefaction can result in the following types of seismic-related ground failure:
 - Loss of bearing strength soils liquefy and lose the ability to support structures
 - Lateral spreading soils slide down gentle slopes or toward stream banks
 - Flow failures soils move down steep slopes with large displacement
 - Ground oscillation surface soils, riding on a buried liquefied layer, are thrown back and forth by shaking
 - Flotation floating of light buried structures to the surface
 - Settlement settling of ground surface as soils reconsolidate
 - Subsidence compaction of soil and sediment

Three factors are required for liquefaction to occur: (1) loose, granular sediment; (2) saturation of the sediment by groundwater; and (3) strong shaking. Because the Proposed Project site is located in an area determined to have a low chance of seismic hazard and the Project would be required to comply with the City of Orland Improvement Standards, the potential for impacts resulting from liquefaction is considered less than significant.

iv) The Project site has flat topography, indicating no potential for landslides. As such, the Proposed Project would have no impact in this area.

Wou	ld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Result in substantial soil erosion or the loss of topsoil?				

As shown in *Table 4.7-1*, the Project soils have a slight erosion potential. A rating of "slight" indicates that erosion is unlikely under ordinary climatic conditions. In addition, the Project site is flat, which would reduce the potential for substantial erosion.

A predominate instigator of erosion on construction sites are storm events and the resulting stormwater runoff. Erosion from stormwater runoff is controlled through adherence to City of Orland General Plan Policy 5.6.A, which requires the preparation of a stormwater pollution prevention plan (SWPPP) in order to comply with the Regional Water Quality Control Board's (RWQCB) General Construction Storm Water Permit. The SWPPP will identify best management practices (BMPs) to be implemented on the Project site to minimize soil erosion. SWPPP generally include the following BMPs:

- Diversion of offsite runoff away from the construction area;
- Prompt revegetation of proposed landscaped areas;
- Perimeter straw wattles or silt fences and/or temporary basins to trap sediment before it leaves the site;
- Regular sprinkling of exposed soils to control dust during construction during the dry season;
- Installation of a minor retention basin(s) to alleviate discharge of increased flows;
- Specifications for construction waste handling and disposal;
- Erosion control measures maintained throughout the construction period;
- Preparation of stabilized construction entrances to avoid trucks from imprinting debris on city roadways;
- Contained wash out and vehicle maintenance areas;
- Training of subcontractors on general construction area housekeeping;
- Construction scheduling to minimize soil disturbance during the wet weather season; and
- Regular maintenance and storm event monitoring.

Note that the SWPPP is a "live" document and should be kept current by the person responsible for its implementation. Preparation of, and compliance with a required SWPPP would effectively prevent Proposed Project onsite erosion and the loss of topsoil from Project implementation. This impact is less than significant.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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-				

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				

As discussed previously, the Project site has no potential for landslides due to the flat topography of the site.

Lateral spreading is a form of horizontal displacement of soil toward an open channel or other "free" face, such as an excavation boundary. Lateral spreading can result from either the slump of low cohesion and unconsolidated material or, more commonly, by liquefaction of either the soil layer or a subsurface layer underlying soil material on a slope, resulting in gravitationally driven movement. One indicator of potential lateral expansion is frost action. Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing (NRCS 2019). As indicated in *Table 4.7-1*, the Web Soil Survey identifies the Project site as having soils with no frost action potential. As such, the potential for impacts due to lateral spreading would be less than significant.

With the withdrawal of fluids, the pore spaces within the soils decrease, leading to a volumetric reduction. If that reduction is significant enough over an appropriately thick sequence of sediments, then regional ground subsidence can occur. This typically only occurs within poorly lithified sediments and not within competent rock.¹ No oil, gas, or high-volume water extraction wells are known to be present in the Project area. According to the USGS, the Project site is not located in an area of land subsidence (USGS 2018). As such, the potential for impacts due to subsidence would be less than significant.

Collapse occurs when water is introduced to poorly cemented soils, resulting in the dissolution of the soil cementation and the volumetric collapse of the soil. In most cases, the soils are cemented with weak clay (argillic) sediments or soluble precipitates. This phenomenon generally occurs in granular sediments situated within arid environments. Collapsible soils will settle without any additional applied pressure when sufficient water becomes available to the soil. Water weakens or destroys bonding material between particles that can severely reduce the bearing capacity of the original soil resulting in damage to buildings and foundations. Because of the required compliance with the City's Improvement Standards, the California Building Code seismic mitigation standards and the distance from active faults the potential for that settlement/collapse at the site is considered unlikely. As such, the potential for impacts due to collapse would be less than significant.

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¹ The processes by which loose sediment is hardened to rock are collectively called lithification.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				
Struc subsi relati soil g	nsive soils are types of soil that shrink or swell as the stures built on these soils may experience shifting, cracide or expand. Expansive soils can be determined by a onship between linear extensibility of a soil and the prepared having a high linear extensibility. Thus, grant nsive, whereas clay-rich soils can have a low to high p	cking, and bro soil's linear o otential for e llar soils typio	eaking damage of the extensibility. The expansive behavically have a low	as soils shrir ere is a direct or, with expa	t ansive
exter shrin perce 3, shr As sh	rding to the NRCS, linear extensibility values for the Pasibility in that range correlate to soils having a low exk-swell potential is low if the soil has a linear extensibent, high if 6 to 9 percent, and very high if more than similar and swelling can cause damage to buildings, rown in <i>Table 4.7-1</i> , 100 percent of the Project site soil troject would have a less than significant impact in this	pansion pote ility of less th percent. If t oads, and oth Is have a low	ential, as noted i an 3 percent, m he linear extens ner structures an	n <i>Table 4.7</i> oderate if 3 ibility is mor id to plant re	1. The to 6 e than pots.
Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?				\boxtimes
	Project is the construction of a truck service center and ment system. The Proposed Project would not use a s			City wastew	ater
Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	\boxtimes			

No known paleontological resources sites were identified during the field survey of the Project site. A search of the UCMP failed to indicate the presence of paleontological resources in the Project area. Although paleontological resources sites were not identified in the Project area, there is the possibility that unanticipated paleontological resources will be encountered during ground-disturbing project-

related activities. As such, this would be considered a potentially significant impact and shall be discussed further in the EIR.

4.8 Greenhouse Gas Emissions

4.8.1 Environmental Setting

Greenhouse gases (GHG) are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases, such as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and chlorofluorocarbons, creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH_4 traps approximately 25 times more heat per molecule than CO_2 , and N_2O absorbs 298 times more heat per molecule than CO_2 (Intergovernmental Panel on Climate Change 2014). Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e). Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

4.8.2 Greenhouse Gas Emissions (VII) Environmental Checklist and Discussion

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				

GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contributes substantially to the phenomenon of global climate change and its associated environmental impacts and as such is addressed only as a cumulative impact.

The Proposed Project would result in greenhouse gases emission during construction and operation. Since a greenhouse gas analysis has not yet been completed for the Proposed Project, it is not possible to determine the impact the Project would have on the environment because of greenhouse gas emissions. As such, this is considered a potentially significant impact and will be further discussed in the EIR.

Wo	ould the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

The City of Orland does not currently have an applicable plan, policy, or regulation adopted for reducing GHG emissions. The Proposed Project would not conflict with any City adopted plans, policies, or regulations adopted for reducing GHG emissions. As identified under Issue a), Project-generated GHG emissions has not yet been determined, therefore, it is not possible to determine if the Project would conflict with California GHG reduction goals. As such, this is considered a potentially significant impact and will be further discussed in the EIR.

4.9 Hazards and Hazardous Materials

4.9.1 Environmental Setting

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined by the California Health and Safety Code, § 25501 as follows:

"Hazardous material" means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

A hazardous material is defined in Title 22, § 662601.10, of the CCR as follows:

A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.

The release of hazardous materials into the environment could potentially contaminate soils, surface water, and groundwater supplies.

Under Government Code § 65962.5, both the Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB) are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their

websites. A search of the DTSC (2019) and SWRCB (2019) lists identified no open cases of hazardous waste violations on, or within $\frac{1}{2}$ mile of the Project site.

The USEPA maintains the Enforcement and Compliance History Online (ECHO) program. The ECHO website provides environmental regulatory compliance and enforcement information for approximately 800,000 regulated facilities nationwide. The ECHO website includes environmental permit, inspection, violation, enforcement action, and penalty information about USEPA-regulated facilities. Facilities included on the site are Clean Air Act stationary sources; Clean Water Act facilities with direct discharge permits, under the National Pollutant Discharge Elimination System; generators and handlers of hazardous waste, regulated under the Resource Conservation and Recovery Act; and public drinking water systems, regulated under the Safe Drinking Water Act. ECHO also includes information about USEPA cases under other environmental statutes. When available, information is provided on surrounding demographics, and ECHO includes other USEPA environmental data sets to provide additional context for analyses, such as Toxics Release Inventory data. According to the ECHO program, the Project site is not listed as having a hazardous materials violation (USEPA 2019).

4.9.2 Hazards and Hazardous Materials (VIII) Environmental Checklist and Discussion

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\boxtimes	

The Proposed Project would allow for the future development of commercial uses on 4.98 acres of land. This development may result in the storage of hazardous materials typically sold or stored in stores such as antifreeze, oil and lubricants for vehicle maintenance as well as household cleaning chemicals. The C-2 and C-H zoning districts also allow for the development of fueling stations which would permit fuel storage on the site. Typical incidents that could result in accidental release of hazardous materials involve leaking storage tanks, spills during transport, inappropriate storage, inappropriate use, and/or natural disasters. If not remediated immediately and completely, these and other types of incidents could cause toxic fumes and contamination of soil, surface water, and groundwater. Depending on the nature and extent of the contamination, groundwater supplies could become unsuitable for use as a domestic water source. Human exposure to contaminated soil or water could have potential health effects depending on a variety of factors, including the nature of the contaminant and the degree of exposure.

Hazardous materials must be stored in designated areas designed to prevent accidental release to the environment. California Building Code requirements prescribe safe accommodations for materials that present a moderate explosion hazard, high fire or physical hazard, or health hazards.

Hazardous materials regulations, which are codified in Titles 8, 22, and 26 of the California Code of Regulations, and their enabling legislation set forth in Chapter 6.95 of the California Health and Safety Code, were established at the state level to ensure compliance with federal regulations and to reduce the

risk to human health and the environment from the routine use of hazardous substances. Protection against accidental spills and releases provided by this legislation includes physical and mechanical controls of fueling operations, including automatic shutoff valves; requirements that fueling operations are contained on impervious surface areas; oil/water separators or physical barriers in catch basins or storm drains; vapor emissions controls; leak detection systems; and regular testing and inspection of fueling stations.

Businesses that sell and store hazardous materials are subject to the County's reporting program. The program requires the preparation of a Hazardous Material Business Plan that provides an inventory of hazardous materials on-site, emergency plans and procedures in the event of an accidental release, and training for employees on safety procedures for handling hazardous materials and what to do in the event of a release or threatened release. These plans are routine documents that are intended to disclose the presence of hazardous materials and provide information on actions to be taken if materials are inadvertently released.

The Proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. These materials would be required to be used, stored, and disposed in accordance with existing regulations and product labeling and would not create a significant hazard to the public or to the environment. Therefore, the Project would have a less than significant impact in this area.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			\boxtimes	

As discussed in Issue a), the Project would not result in the routine transport, use, disposal, handling, or emission of any hazardous materials that would create a significant hazard to the public or the environment. Potential construction-related hazards could be created during the course of Project construction at the site, given that construction activities involve the use of heavy equipment, which uses small and incidental amounts of oils and fuels and other potentially flammable substances. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials used during construction. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, state, and federal law.

All hazardous materials on the site would be handled in accordance with city and state regulations. Because any hazardous materials used for operations would be in small quantities, long-term impacts

associated with handling, storing, and disposing of hazardous materials from project operation would be less than significant.

less t	han significant.				
Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				\boxtimes
	nearest public school to the Project site is Orland High ct site. The Project would have no impact in this area.		roximately one r	nile from the	е
Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?				\boxtimes
know on th violat includ 2019	er Government Code § 65962.5, both the DTSC and the vn to have hazardous substances present in the environeir websites. A search of the DTSC and SWRCB lists id tions on the Project site. Therefore, the Project site and ded on a list of hazardous materials sites compiled put; SWRCB 2019). As a result, this would not create a signonment and would have no impact.	nment. Both entified no c d the Propos rsuant to Go	agencies mainta pen cases of ha ed Project are no vernment Code	ain up-to-da zardous was ot on a parc § 65962.5 (D	ite lists ite el
Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				\boxtimes
Tha	Ouland Hairle Field Aims and is accommunicately 2.6 miles a	authoost af	uba Duaiaataita 1	The project	cito ic

The Orland Haigh Field Airport is approximately 3.6 miles southeast of the Project site. The project site is not located in the airport's safety areas as shown on Map 2 of the Comprehensive Airport Land Use Plan

for the Orland Haigh Field Airport (GCALUC 1991). Furthermore, the Project does not propose any new structures which may impede aircraft operations. Thus, no impact would occur.

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				

Standard evacuation routes have not been designated in Glenn County or Orland. However, the Glenn County Sheriff's Office, Office of Emergency Services, has an online link to an emergency preparedness web page stating that in the event of mandatory evacuation, residents will be advised of safe routes to follow, locations of shelters, and other actions that may need to be taken.

According to the Orland General Plan DEIR, it is likely that Caltrans facilities such as State Route 32 and Interstate 5 would be used to evacuate the community in an emergency. Major county roads such as Sixth Street (County Road 99W) and South Street are also suited to evacuation, depending on the location of the emergency (Orland 2010b).

The Proposed Project does not include any actions that would impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. All construction activities would not impede the use of surrounding roadways in an emergency evacuation. The Project involves the construction of a truck service center and would not interfere with any emergency response or evacuation plans. Implementation of the Proposed Project would result in no impact in this area.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 not in an area designated by California Department of Forestry and Fire Protection (2007) as a Fire Hazard Severity Zone. Furthermore, no Very High Fire Hazard Severity Zones are located nearby. Finally, the location of the Project site makes it readily accessible by emergency personnel and vehicles in the event of a wildland fire. For these reasons, this impact would be less than significant.

4.10 Hydrology and Water Quality

4.10.1 Environmental Setting

Regional Hydrology

Surface Water

The City of Orland is located in the greater Sacramento River hydrologic region. The Sacramento River hydrologic region covers approximately 17.4 million acres (27,200 square miles). The region includes all or large portions of Modoc, Siskiyou, Lassen, Shasta, Tehama, Glenn, Plumas, Butte, Colusa, Sutter, Yuba, Sierra, Nevada, Placer, Sacramento, El Dorado, Yolo, Solano, Lake, and Napa counties. Small areas of Alpine and Amador counties are also within the region. Geographically, the region extends south from the Modoc Plateau and Cascade Range at the Oregon border, to the Sacramento-San Joaquin Delta (California Department of Water Resources (DWR 2006).

The City of Orland and the Project site are located within the boundaries of the Stony Creek watershed. The Stony Creek watershed encompasses approximately 700 square miles and is the second largest Sacramento River tributary on the west side of the Sacramento Valley (Orland 2010b). There are three major impoundments on Stony Creek: Black Butte, Stony Gorge, and East Park reservoirs.

Groundwater

The Project site is underlain by the Sacramento Valley Groundwater Basin and the Colusa Subbasin. The City of Orland uses groundwater as the source for potable water in the city. This groundwater is extracted from the Colusa Groundwater Subbasin. According to the California DWR, the Colusa Subbasin covers an area of approximately 1,434 square miles (918,380 acres) (DWR 2006). The storage capacity of the subbasin was projected based on estimates of specific yield for the Sacramento Valley as developed in DWR Bulletin 118 (DWR 2006). The estimated storage capacity to a depth of 200 feet is approximately 13,025,887 acre-feet or 4.24 trillion gallons. Estimates of groundwater extraction for the Colusa Subbasin are based on surveys conducted by the California DWR during 1993, 1994, and 1999. Surveys included land use and sources of water. Estimates of groundwater extraction for agricultural, municipal, and industrial, and environmental wetland uses are 310,000; 14,000; and 22,000 acre-feet, respectively. Deep percolation from applied water is estimated to be 64,000 acre-feet. The DWR has not identified the Colusa Subbasin as overdrafted in its DWR Bulletin 118. Also, there has been no indication of any existing or anticipated overdraft condition in studies prepared by other entities (DWR 2006).

The DWR Groundwater Information Center Interactive Map Application (GICIMA) provides groundwater levels through the state. Among other things, this interactive on-line tool can illustrate the change in groundwater depth of a certain time period for a particular location, such as the City of Orland. According to the GICIMA information, the distance from groundwater to ground surface in the Project area has increased by approximately 20 feet between the spring of 2008 and the spring of 2018. In other words, the groundwater water surface was 60 feet below ground surface 2008 and was approximately 80 feet below ground surface in 2018 (DWR 2019). However, the depth to groundwater varies by location and rainfall. For example, at the end of the recent drought, from 2014 to 2017, the groundwater to ground

surface depth was approximately 95 to 100 feet below the surface in the Fall of 2016 in the Project area. It was 60 to 70 feet below the surface in the eastern part of Orland (DWR 2019).

The Sustainable Groundwater Management Act (SGMA) directs DWR to identify groundwater basins and subbasins in conditions of critical overdraft. As defined in the SGMA, "A basin is subject to critical overdraft when continuation of present water management practices would probably result in significant adverse overdraft-related environmental, social, or economic impacts." The Colusa groundwater subbasin is not listed as a critically overdrafted basin (DWR 2018a). DWR is currently working on an update to the Bulletin 118 groundwater report. However, more up to date information of the Colusa subbasin in not available at this time.

Project Site Hydrology and Onsite Drainage

The are no existing natural hydrological features on the 4.98-acre Project site. There is an irrigation ditch adjacent to the northern boundary along County Road 13 and a small drainage swale within the northern three parcels of the Project site site. As shown in *Figure 6*, development of the proposed truck service center would result in the undergrounding of the drainage swale and a driveway and culvert and undergrounding of the irrigation ditch along County Road 13 adjacent to the Project site.

The topography of the site is flat with little elevation change, varying from approximately 261 to 266 feet AMSL over the 4.98-acre site. Upon completion of the Proposed Project, the site topography would be the same of pre-Project conditions.

Orland experiences extreme seasonal variation in monthly rainfall. The rainy period of the year lasts for 8.9 months, from September 17 to June 15, with a sliding 31-day rainfall of at least 0.5 inches. The most rain falls during the 31 days centered around February 16, with an average total accumulation of 5.9 inches. The rainless period of the year lasts for 3.1 months, from June 15 to September 17. The least rain falls around July 31, with an average total accumulation of 0.0 inches (Weatherspark 2018).

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map for the Project area (Map No. 06021C0400D) shows that the Project site is in unshaded Zone X, meaning that the area is outside of the 0.2 percent annual chance (500-year) floodplain (FEMA 1998).

4.10.2 Hydrology and Water Quality (IX) Environmental Checklist and Discussion

Wor	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			\boxtimes	

In accordance with NPDES regulations, the State of California requires that any construction activity affecting 1 acre or more obtain a General Construction Activity Stormwater Permit (General Permit) to minimize the potential effects of construction runoff on receiving water quality. Performance standards for

obtaining and complying with the General Permit are described in NPDES General Permit No. CAS000002, Waste Discharge Requirements, Order No. 2009-0009-DWQ.

General Permit applicants are required to submit to the appropriate regional board Permit Registration Documents for the Project, which include a Notice of Intent (NOI), risk assessment, site map, signed certification statement, an annual fee, and a SWPPP. The SWPPP includes pollution prevention measures (erosion and sediment control measures and measures to control non-stormwater discharges and hazardous spills), demonstration of compliance with all applicable local and regional erosion and sediment control standards, identification of responsible parties, and a detailed construction timeline. The SWPPP must also include implementation of BMPs to reduce construction effects on receiving water quality by implementing erosion control measures and reducing or eliminating non-stormwater discharges.

Examples of typical construction best management practices included in SWPPPs include, but are not limited to, using temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; storing materials and equipment to ensure that spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan; and installing sediment control devices such as gravel bags, inlet filters, fiber rolls, or silt fences to reduce or eliminate sediment and other pollutants from discharging to the drainage system or receiving waters. Stormwater pollution prevention plan BMPs are recognized as effective methods to prevent or minimize the potential releases of pollutants into drainages, surface water, or groundwater. Strict SWPPP compliance, coupled with the use of appropriate BMPs, would reduce potential water quality impacts during construction activities.

While there are no creeks, streams or rivers exist on the Project site, there is an irrigation ditch on the northern perimeter of the Project site to deliver water to adjacent agricultural fields when necessary (the ditches are predominately dry year-round). The proposed Truck Service Center would be required to prepare and comply with an approved SWPPP. Compliance with this requirement would reduce the potential water quality impacts to less than significant.

The Proposed Project includes three parcels which would be less than one-acre in size if the Project lot line adjustment were to be approved and would therefore not be required to comply with NPDES regulations including the development of a SWPPP. However, Orland Municipal Code Chapter 17.82 requires site plan review of all projects in the City. Site plan review includes review of a proposed project's grading and drainage. Review of the grading and drainage as to their conformance with City standards would protect water quality. As such, any future commercial development on these three parcels would not result in a violation of any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Therefore, this would have a less than significant impact.

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				

The City of Orland uses groundwater as the source for potable water in the City. This groundwater is extracted from the Colusa Groundwater Subbasin, part of the Sacramento Valley Groundwater Basin. The California Department of Water Resources (DWR 2006) Bulletin 118 identified the Colusa Subbasin groundwater supply as follows:

"Generally, groundwater level data show an average seasonal fluctuation of approximate 5-feet for normal and dry years. Overall there does not appear to be any increasing or decreasing trends in groundwater levels."

The Proposed Project would increase the demand for groundwater in the city. The amount of groundwater used by the Proposed Project would depend on not only the proposed Truck Service Center, but also on any future commercial uses on the remaining three parcels. The amount of water for the truck wash can be accurately estimated because the use is known. However, for those unknown future uses on the remaining three parcels, only an estimate can be determined. The City provides water use estimates based on housing unit equivalent (HUE), the amount of water a single family home would use on a monthly basis. The average daily water demand per HUE is 571 gallons. The commercial HUE is 3,985 gpd, while the high-density residential HUE is 255 gpd (Orland 2015). Using this factor, the future commercial development on the three parcels has the potential to result in a commercial water demand of 11,955 gpd.² The Project is anticipated to have a water demand of approximately 1,500 gpd. Based on these numbers, a total new groundwater demand for the Proposed Project would be 13,455 gpd or 4.9 million gallons per year. The Project's annual water demand represents 0.0001 percent³ of the available groundwater in the Colusa Groundwater Subbasin. Therefore, the project would have a less than significant impact on groundwater supply.

Additionally, the Proposed Project would have the potential to remove a portion of the 4.98 acre site's potential groundwater recharge area due to the development of this area with impervious surfaces. However, according to the Orland General Plan Update EIR (Orland 2010b), the majority groundwater recharge in the city comes from Stony Creek. Development of this area would not affect the recharge ability of Stony Creek. Therefore, the project would have a less than significant impact on groundwater recharge.

Environmental Checklist and Discussion

 $^{^{2}}$ 3,985 gpd/HUE x 3 HUE = 11,955 gpd

³ 4.9 million gallons of project annual water demand / 4.24 trillion gallons of water in the Colusa Groundwater Subbasin = 0.0001 percent.

Wou	ld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner that would:				
	i) result in substantial erosion or siltation on- or off-site;				
	ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				
	(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			\boxtimes	
	(iv) impede or redirect flood flows?				

i) No creeks, streams or rivers exist on or nearby the Project site. As such, siltation of on- or off-site waterways would not occur.

The Truck Service Center project construction activities would result in soil disturbances of at least one acre of total land area. As such, an NPDES Construction General Permit would be required prior to the start of construction. Excavation and grading activities associated with the Proposed Project will reduce vegetative cover and expose bare soil surfaces making these surfaces more susceptible to erosion. To comply with the requirements of the NPDES Construction General Permit AWA will be required to file a NOI with the State of California and submit a SWPPP defining BMPs for construction and post-construction related control of the Proposed Project site runoff and sediment transport. Requirements for the SWPPP include incorporation of both erosion and sediment control BMPs. SWPPP generally include the following applicable elements:

- diversion of offsite runoff away from the construction area;
- prompt revegetation of proposed landscaped areas;
- perimeter straw wattles or silt fences and/or temporary basins to trap sediment before it leaves the site;
- regular sprinkling of exposed soils to control dust during construction during the dry season;
- installation of a minor retention basin(s) to alleviate discharge of increased flows;
- specifications for construction waste handling and disposal;

- erosion control measures maintained throughout the construction period;
- preparation of stabilized construction entrances to avoid trucks from imprinting debris on city roadways;
- contained wash out and vehicle maintenance areas;
- training of subcontractors on general construction area housekeeping;
- construction scheduling to minimize soil disturbance during the wet weather season; and
- regular maintenance and storm event monitoring.

Note that the SWPPP is a "live" document and should be kept current by the person responsible for its implementation. Preparation of, and compliance with a required SWPPP would effectively prevent Proposed Project on-site erosion and sediment transport off-site. This will reduce potential runoff, erosion, and siltation associated with construction and operation of the Proposed Project. The effects of the Proposed Project on onsite and offsite erosion and siltation, therefore, would be less than significant.

- ii) Implementation of the Proposed Project would alter the existing drainage patterns on the site by adding an impermeable surface to portions of the site. Impervious surfaces will allow stormwater to move more quickly through the site, increasing the rate of runoff. However, all new development would be required to comply with City storm drainage regulations, including Policy 4.2.A.2 of the General Plan which requires that all new development projects be designed to avoid increases in peak storm runoff levels. Therefore, the proposed project would have a less than significant impact on causing flooding on- or off-site.
- See discussion of Issues i) and ii), above. The nearest existing stormwater drainage facilities are located at the intersection of Commerce Lane/County Road HH and Ide Street/County Road 13 at the northeast corner of the Project site. The Truck Service Center site improvements include the construction of curbs, gutters and sidewalks along County Road HH and County Road 13 adjacent to the site and the converting the existing canal at the northeast corner of the site to an underground storm drainage facility. The Truck Service Center site would be graded to direct stormwater flows to existing and proposed drainage facilities. All future commercial development would be required to provide curbs, gutters and sidewalks along their street frontage as required by City code. Runoff from the site is not expected to be of sufficient quantity to overwhelm existing and proposed stormwater drainage facilities. As such, this impact would be considered less than significant.

Activities associated with operation of the Proposed Project are not expected to generate substances that can degrade the quality of water runoff. While potential impacts could result from vehicles and other users at the Proposed Project site during operation, all potential impacts to water quality would be reduced by stormwater pollution control measures and wastewater discharge BMPs required at the Project site as a part of Project development and operation. Therefore, impacts during operation would be considered less than significant.

iv) FEMA flood hazard maps (Map 06021C0400D) shows that the Project site is in unshaded Zone X. The Project site is not located within a flood zone. Therefore, implementation of the Proposed Project will not have an impact related to impeding or redirecting flood flows

Woi	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				

The Project site is not protected by levees from any flood hazard. There are no natural waterways on or near the Project site. No large bodies of water exist near the Proposed Project site. The Project site is not located within a potential tsunami or seiche inundation area. Damage due to a seiche, a seismic-induced wave generated in a restricted body of water would not occur.

Dam failure, the collapse or failure of an impoundment that causes significant downstream flooding, is a potential hazard for Orland. Flooding of the area below the dam may occur as a result of structural failure of the dam or overtopping. The collapse and structural failure of a dam may be caused by a severe storm, earthquakes, or internal erosion of piping caused by embankment and foundation leakage. Larger dams whose waters could inundate significant portions of the City include the Shasta Dam (in Shasta County) and Black Butte Dam on Stony Creek. Black Butte Dam is subject to flooding the City of Orland Planning Area in approximately two hours as a result of a dam failure.

Black Butte Dam is a federal dam project and is owned, operated, and maintained by the U.S. Army Corp of Engineers (USACE). USACE's dam safety professionals carry out a dam safety program which provides continuous assessment of the dam structure and operation. Therefore, an event such as the failure of Black Butte Dam has an extremely low probability of occurring and is not considered to be a reasonably foreseeable event. Based on the discussion above, there would be no impact in this area.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

The City of Orland is a participating member of the Glenn Groundwater Authority (GGA) formed in 2017. However, the Groundwater Sustainability Plan is not anticipated to be completed until 2022 (Glenn County 2019). As such, the Project would have no impact to the groundwater management plan.

The Project site is also located within the Water Quality Control Plan (Basin Plan) for the Central Valley Region - Sacramento River Basin (DWR 2018b). However, as stated under Item C) above, the Project is obliged to comply with water quality protection requirements of the NPDES Construction General Permit BMPs for construction and post-construction related control of the Proposed Project site runoff and

sediment transport. Compliance with these requirements would eliminate the potential for conflicts with the water quality control plan. As such, the Project would have a less than significant impact in this area.

4.11 Land Use and Planning

4.11.1 Environmental Setting

The Project site is located in a developing urban/agricultural interface area on the western edge of the Orland city limits. Adjacent uses include the vacant land, the industrial uses of Hardwood Creations, rural residential, and Interstate 5 (I-5) to the east, a trailer sales commercial lot, agricultural uses and rural residential to the south, agricultural uses and rural residential to the west and the Pilot/Flying J truck stop, agricultural uses and vacant land to the north. See *Figure 3. Surrounding Uses*. The nearest home is directly adjacent to the Project's western boundary. Other residential uses are within 450 feet of the Project site.

There are commercial, industrial, and more dense residential uses within close proximity of the Project site. For example, the site is directly adjacent diagonally to the recently constructed Pilot/Flying J commercial center which includes a truck fueling station, an auto fueling station, restaurants and a convenience market. Additionally, less than a ¼ mile from the Project site are two mobile home parks. Finally, the area directly north of the project site is zoned for commercial use and has been approved for the development of a hotel and restaurant by the City.

The Project includes a General Plan amendment, a prezone, and an annexation by the City for five parcels currently within Glenn County jurisdiction. As shown in *Table 4.11-1*, the Project requests a General Plan land use designation change to Commercial and a prezone to C-H and C-2 for the Project site.

Table 4.11-1. Parcel Land Use

		General Plan Des	General Plan Designation (Orland)		
Parcel APN	Acres	Current	Proposed	Prezoning (Orland)	
045-170-018	1.19	High Density Residential	Commercial	C-H	
045-170-019	0.95	High Density Residential	Commercial	C-H	
045-170-020	0.93	High Density Residential	Commercial	C-H	
045-170-021	0.99	High Density Residential	Commercial	C-H	
045-170-024	0.92	Low Density Residential	Commercial	C-2	

Notes: C-H = Highway Commercial, C-2 = Cummunity Commercial

Table 4.11-2 Land Use Comparison identifies the existing and proposed land uses and the maximum densities that these uses could yield. As shown, in *Table 4.11-1* above, the existing City of Orland General Plan land use designation for the Project site is Low Density and High Density Residential. Prezoning these land uses as indicated in the General Plan would result in a prezoning of R-1 and R-3. The General Plan identifies the maximum number of dwelling units per acre by use type. For Low Density Residential this density is 6 dwelling units (du) per acre (ac) and 25 du/ac for High Density Residential. Under existing

conditions, using these factors and the parcel acreages, the total number of residential units possible for the Project site would be 107, 102 of which are multifamily units.

As discussed above, the Project proposes a land use change. This change would result in prezoning the site to C-H and C-2. The Orland General Plan also identifies the maximum building coverage for the Commercial land use at 60 percent per acre. Using these factors, the Proposed Project would have a maximum building square footage of 80,015 square feet as shown in *Table 4.11-2*. Please note however, these maximum square footages do not take into account the area required for parking, site constraints, height constraints, landscaping, setbacks, development type, and other factors that would limit the potential square footage. The actual square footage would most likely not reach the maximum potential.

Table 4.11-2. Land Use Comparison

D I ADM	A	Existing Potential		Proposed Potential		
Parcel APN	Acres	Prezoning Maximum (Max Density/Ac) Units		Prezoning (Max Building Coverage/Ac)	Maximum Building Sq. Ft	
045-170-018	1.19	R-3 (25 du/ac)	30	C-H (0.74 ac as proposed 60% building coverage)	19,341 sq. ft.	
045-170-019	0.95	R-3 (25 du/ac)	24	C-H	11,800 sq. ft.	
045-170-020	0.93	R-3 (25 du/ac)	23	(2.28 ac as proposed)	as proposed	
045-170-021	0.99	R-3 (25 du/ac)	25	C-H (60% building coverage)	25,613 sq. ft.	
045-170-024	0.92	R-1 (6 du/ac)	5	C-2 (60% building coverage)	23,261 sq. ft.	
Total	4.98	_	107		80,015 sq. ft.	

4.11.2 Land Use and Planning (X) Environmental Checklist and Discussion

Woo	uld the Project: Physically divide an established community?	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact			
only o	The Proposed Project site is located in an area of mixed commercial, residential, and agricultural uses. The only established "community" of any type is the two mobile home parks located approximately ¼ mile to the north of the project site. The proposed project would not divide either of these communities. Therefore, implementation of the proposed project will not divide an established community.							
Woi	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact			
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or							

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
regulation adopted for the purpose of avoiding or mitigating an environmental effect?	·			·

The Proposed Project includes a General Plan Amendment, Prezoning, Annexation, and the development of a 11,800 square foot truck service center. The area is identified and an area for urban development in the Orland General Plan and the Glenn County General Plan. The Proposed Project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur.

4.12 Mineral Resources

4.12.1 Environmental Setting

The State-mandated Surface Mining and Reclamation Act of 1975 requires the identification and classification of mineral resources in areas within the State subject to urban development or other irreversible land uses that could otherwise prevent the extraction of mineral resources. These designations categorize land as Mineral Resource Zones (MRZ-1 through MRZ-4).

Stony Creek is located on the northern border of the City. Lower Stony Creek traverses its alluvial fan from Black Butte Dam to the Sacramento River, following one of three major fingers of gravelly soil that represent former channel courses. In-stream gravel mining has been particularly intensive in Lower Stony Creek. Generally, Stony Creek aggregates consist of stream channel deposits, including flood and overbank deposits in the upper reaches, and are classified as MRZ-2a (marginal reserves) (Orland 2010b). However, there is currently no mining activity occurring within, nor is it allowed in, the Project vicinity. Furthermore, the Orland General Plan does not identify any mineral resource zones within the City of Orland or unincorporated County lands adjacent to the City (Orland 2010a).

4.12.2 Mineral Resources (XI) Environmental Checklist and Discussion

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?				

As discussed above, the City's existing General Plan does not identify any mineral resources in the Project vicinity, including on the Project site. Therefore, no impacts would occur to mineral resources.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				

The Project site is not identified as a mineral resource recovery site in the Orland General Plan. There would be no impact in this area.

4.13 Noise

4.13.1 Environmental Setting

Noise Fundamentals

Noise is generally defined as sound that is loud, disagreeable, or unexpected. The selection of a proper noise descriptor for a specific source is dependent on the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include the average hourly noise level (in L_{eq}) and the average daily noise levels (in L_{dn} /CNEL).

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks, and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Mobile transportation sources, such as highways, and hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3.0 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance from the source. Noise generated by stationary sources typically attenuates at a rate of approximately 6.0 to 7.5 dBA per doubling of distance from the source (USEPA 1971).

Sound levels can be reduced by placing barriers between the noise source and the receiver. In general, barriers contribute to decreasing noise levels only when the structure breaks the "line of sight" between the source and the receiver. Buildings, concrete walls, and berms can all act as effective noise barriers. Wooden fences or broad areas of dense foliage can also reduce noise, but are less effective than solid barriers.

Vibration

Ground vibration can be measured several ways to quantify the amplitude of vibration produced. This can be through peak particle velocity or root mean square velocity. These velocity measurements measure maximum particle at one point or the average of the squared amplitude of the signal, respectively. Vibration impacts on people can be described as the level of annoyance and can vary depending on an

individual's sensitivity. Generally, low-level vibrations may cause window rattling but do not pose any threats to the integrity of buildings or structures.

Wo	uld the project result in	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impac
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	\boxtimes			
perso docu noise	lifficult to specify noise levels that are generally accept on may be unnoticed by another. Standards may be ba mented noise levels or based on studies of the ability of conditions. However, all such studies recognize that in dards usually address the needs of the majority of the	sed on docur of people to s ndividual resp	mented compla sleep, talk, or w oonses vary con	ints in respo ork under va	nse to
Proje as the equip	truction and operation of the truck service center would ct vicinity. The noise levels generated by truck wash we be type and specific model of the equipment, the opera coment and the prevailing wind direction. As such, with initial for noise related impacts cannot be determined. T	ould vary greation being pe out a compre	atly depending erformed, the co ehensive noise a	upon factors andition of tl analysis, the	s such he
Wo	uld the project result in	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impac
b)	Generation of excessive groundborne vibration or groundborne noise levels?	\boxtimes			
and r such,	truction operations have the potential to result in vary noise levels, depending on the specific construction eq without a comprehensive noise analysis, the potential andborne noise levels cannot be determined. Therefore	uipment used for excessive	d and operation groundborne	ns involved. A vibration or	
For	a project	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impac
c)	Located within the vicinity of a private airstrip or				Impac

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 nearest airport to the Project site is the Orland Haigh Field Airport, located approximately 3.6 miles southeast of the Project site. The Project site is not located within an area covered by an airport land use plan or within two miles of a public or private use airport. Thus, no impact would occur with implementation of the Proposed Project.

4.14 Population and Housing

4.14.1 Environmental Setting

According to the California Department of Finance (DOF), which provides estimated population and housing unit demographics by year throughout the State, the City's population increased 7.6 percent between 2010 and 2018, from 7,291 to 7,932. DOF estimates that there were 2,937 total housing units in the City, and a 6.2 percent vacancy rate as of January 1, 2018. The average household size was estimated to be 2.88 persons per household during the same time period. (DOF 2018).

4.14.2 Population and Housing (XIII) Environmental Checklist and Discussion

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Induce substantial 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)?				
	·				
of an	ew roads or extensions of existing roads are proposed y new homes and only a slight increase of employmen ases in population growth would not occur as a result	nt opportuni	ties. Therefore, d		
of an incre	y new homes and only a slight increase of employmen	nt opportuni	ties. Therefore, d		

No residences would be removed as a result of the proposed Truck Service Center. If the Proposed Project were to develop as commercial uses in the future, three single family homes would be removed. However, the removal of a total of three housing units would not cause the construction of a substantial number of

replacement housing elsewhere. The Project would have a less than significant impact on existing housing.

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				

As discussed under Issue b), the Project would not involve the removal or relocation of substantial number of housing and would therefore not displace a substantial number of people or necessitate the construction of any replacement housing. The Project would have a less than significant impact on existing housing.

4.15 Public Services

4.15.1 Environmental Setting

Public services include fire protection, police protection, parks and recreation, and schools. Generally, impacts in these areas are related to an increase in population from a residential development. Levels of service are generally based on a service to population ratio, except for fire protection, which is usually based on a response time. For example, the Orland General Plan Policy PFS-8.11 provides a Police Department staffing ratio of 1.9 officers per 1,000 population. Further, in 2003, the Orland City Council set the park dedication standard at 8.4 acres per 1,000 residents. Finally, the average response time for fire protection and emergency medical services in Orland is three to five minutes for arrival at the station, approximately one minute to prepare and leave the station, and an additional two to three minutes to the actual call site (Orland 2010b).

Police Services

The Orland Police Department (OPD) will provide law enforcement services to the Project site. OPD reported total calls for service was 2,686 in 2018 and arrests had increased to 458; 33 were DUI related and 1/3 were a combination of drugs and alcohol (Orland 2018a). The OPD has patrol service 24 hours a day. The Police Department also offer the following services: certified child seat installer, free bike helmets, Alice Training (Active Shooter Training), and Volunteers in Polices Services Program. The OPD hired two additional patrol officers in 2018, however two new additional officers, one Community Service Officer, a Lieutenant or additional Sergeant position, a full-time Narcotics Task Force officer and a full-time School Resource Officer are planned for the future (Orland 2018a). The City's police station is located at 817 Fourth Street, approximately 0.9 miles east of the Project site.

Fire Services

The City of Orland Volunteer Fire Department (OVFD) will provide fire protection and emergency medical response to the Project site. OVFD responds to various emergency and non-emergency incidents

including, but not limited to, all types of fire; medical emergencies; public assists and hazardous situations. As of February 2019, there are 45 active volunteers in the OVFD. There were 702 calls in 2018 (380 city calls and 322 rural calls). Medical calls (440) have increased within the City in the past three years (Orland 2019). The City's Fire Station is located at 810 Fifth Street, approximately 0.7 mile east of the Project site.

Schools

The Orland Unified School District (OUSD) provides educational services for the City of Orland. The District has two elementary schools (one for grades K-2 and one for grades K-5), one middle schools (grades 6-8), one high school (grades 9-12), and one continuation high school, one community day school (OUSD 2018b). The District had 2,210 students in the 2016-2017 school year (OUSD 2018b). According to the California Department of Education, (DOE), the City also has one private school, the Providence Christian School (DOE 2017).

Parks

The City of Orland has six parks ranging in size from 0.26 - 23 acres for a total acreage of 47.16 acres (Orland 2010c). Based on the DOE 2018 estimated City population of 7,844, the City's parkland to population ratio is six acres of parks/1,000 population⁴.

4.15.2 Public Services (XIV) Environmental Checklist and Discussion

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	Fire Protection?				
	Police Protection?				
	Schools?				
	Parks?				\boxtimes

 $^{^4}$ 47.16 acres of parks / (7,844 / 1,000) population = 6.0 acres of parks / 1,000 population.

Less the				
	Potentially	with	Less than	
Would the Project:	Significant	Mitigation	Significant	No
	Impact	Incorporated	Impact	Impact
Other Public Facilities?				\boxtimes

Fire Protection

The Project site is located approximately 0.7 miles from the City's fire station. The Project site is currently served by the City for fire protection and the devolvement of the truck service center or future commercial endeavors would not increase the response time required for the OVFD. While additional OVFD oversite may be required for future commercial uses at the Project site, the Project would not require additional fire facilities to serve the commercial uses. The Proposed Project would not require any additional OVFD facilities and is not anticipated to create an additional burden on exiting fire facilities. Therefore, the Project would have a less than significant impact in this area.

Police Services

The Proposed Project would not result in a significant increase in demand for police protection resulting in new or expanded police facilities. Police facilities and the need for expanded facilities are based on the staffing levels these facilities must accommodate. Police staffing levels are generally based on the population/police officer ratio, and an increase in population is usually the result of an increase in housing or employment. The proposed truck service center would result in minimal employment opportunities. Because of the limited square footage possible for future commercial uses on the adjacent parcels, development of these uses would also result in would result in minimal employment opportunities.

Because the Proposed Project would not increase the population or result in substantial employment gains, the Project would not result in the need for increase in police protection or police facilities. Therefore, the Proposed Project would have a less than significant impact in this area.

Schools

The Proposed Project is the development of a truck service center and future commercial uses. Because the Proposed Project would not increase the population or result in substantial employment gains, an increase of student population in Orland would not occur nor would require additional educational facilities. Therefore, the Proposed Project would have no impact in this area.

Parks

As stated previously, the need for additional parkland is primarily based on an increase in population to an area. Given that the Proposed Project would not increase the City's population, the Project would not burden any parks in the surrounding area beyond capacity by generating additional recreational users. Therefore, the Proposed Project would not require the construction or expansion of park and recreational facilities and would also not result in an increase in demand for parks and recreation facilities in the surrounding area. There would be no impact to parks from construction of the Proposed Project.

Other Public Facilities

The Proposed Project does not result in an increase in housing or population in the city resulting in an increased use of other public facilities such as the Orland Free Library or City Hall. Therefore, the Project would have no impacts on other public facilities.

4.16 Recreation

4.16.1 Environmental Setting

The City has ± 47.16 acres of parkland. Additionally, the City also provides recreational facilities, such as adult and youth sports leagues for the enjoyment of city residents.

4.16.2 Recreation (XV) Materials Checklist

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Increase the use of existing neighborhoo regional parks or other recreational facility that substantial physical deterioration of facility would occur or be accelerated?	ties such			\boxtimes
As stated previously, the need for additional par an area. Given that the Proposed Project would r	not increase the City's p	oopulation, the F	Project would	

an area. Given that the Proposed Project would not increase the City's population, the Project would not burden any parks in the surrounding area beyond capacity by generating additional recreational users. Therefore, the Proposed Project would not increase the use of park and recreational facilities resulting in substantial physical deterioration of the facility. There would be no impact to recreational facilities from construction of the Proposed Project.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				

The Proposed Project is a commercial development. No recreational facilities are a part of the Project. The Proposed Project would have a no impact in this area.

4.17 Transportation/Traffic

4.17.1 Environmental Setting

Existing Street and Highway System

The Proposed Project will be served by several major roadways. Regional access is provided by Interstate 5 and State Route 32, which link the site with the other Northern California communities to the north and south and with the City of Orland to the east. Local access to the Project site is provided via Newville Road and County Road HH.

Alternative Transportation Modes

Sidewalks. Concrete and asphalt sidewalks exist at various locations along most City of Orland streets but become less prevalent on Glenn County roads adjoining the community. There are few sidewalks in the area west of I-5 although there is existing sidewalk on the north side of Newville Road (SR 32) across I-5.

Bicycle Facilities. Presently there are no formally designated bicycle lanes or bicycle facilities in the City of Orland. However, the City understands the need to move people through the community. The City is planning multi-use pathways along Stony Creek, as well as multi-use pathways within the right-of-ways of undergrounded canals. Additionally, street widths can accommodate bicycle traffic in some areas, and bicycle racks are available at schools and parks.

Public Transit. Public transportation bus service is provided to the City of Orland through Glenn Ride, which is a transit service provided by Glenn County. It is a fixed-route bus system with seven round trips every weekday and three round trips on Saturday from Willows to Chico. There are currently 14 bus stops in Orland. The stop closest to the proposed project is at the 9th Street / Newville Road intersection (i.e., CVS Pharmacy & Burger King).

4.17.2 Transportation/Traffic (XVII.) Environmental Checklist and Discussion

			Less than Significant		
Wo	uld the Project:	Potentially Significant Impact	With Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?	\boxtimes			
nclu	Proposed Project is anticipated to increase roadway trading bicycle and pedestrian facilities. Therefore, this po	•		-	n the
		•		-	n the

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

CEQA Guidelines Section 15064.3, subdivision (b) provides criteria for analyzing transportation impacts based on a vehicle miles traveled (VMT) methodology instead of the now superseded (as of January 1, 2019) level of service (LOS) methodology. Pertinent to the Proposed Project are those criteria identified in Section 15064.3(b)(1) Land Use Projects. According to this section:

"Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor⁵ should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact."

However, Section 15064.3(b)(3) allows an agency to determine a project's transportation impact on a qualitative basis if a VMT methodology is unavailable, as is the case with the Proposed Project.

Section 15064.3(b)(3) is as follows:

"Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate."

Additionally, Section 15064.3(c) allows an agency to use the VMT methodology immediately or defer until July 1, 2020 when the VMT methodology is required of all agencies in the state. Section 15064.3(c) is as follows:

"The provisions of this section shall apply prospectively as described in section 15007. A lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide."

Because the City does not have an adopted VMT methodology at this time, for the Proposed Project, the City choses to defer to the existing LOS methodology to determine the Project's impact to local roadways.

The Proposed Project would increase the amount of traffic on the local roadways an may result in a potentially significant impact. As such, how the Proposed Project will affect the local roadway LOS in the area will be discussed further in the EIR.

⁵ "High-quality transit corridor" means an existing corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours. For the purposes of this Appendix, an "existing stop along a high-quality transit corridor" may include a planned and funded stop that is included in an adopted regional transportation improvement program.

			Less than		
Wo	uld the Project:	Potentially Significant Impact	Significant With Mitigation Incorporated	Less than Significant Impact	No 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)?				
site.	ifications to roadways may be required to allow for se Modifications to the local roadways would result in a osed Project will affect these roadways will be discuss	potentially sig	nificant impact		
			Less than Significant		
		Potentially	With	Less than	
Wo	uld the Project:	Significant Impact	Mitigation Incorporated	Significant Impact	No Impact
d)	Result in inadequate emergency access?			\boxtimes	

The truck service center project provides three driveways to the site allowing access to all areas of the site. The combination of these driveways would allow adequate access to the site in the event that one or two of the driveways became unusable. As with all development projects in the City, any future development of the remaining parcels will be reviewed for site access by the City Fire Chief including adequate emergency access. Therefore, the Project would have a less than significant impact regarding emergency access.

4.18 Tribal Cultural Resources

4.18.1 Environmental Setting

The project area is located within what is historically documented as Central Wintun (Nomlaki) territory. There were two major divisions of Nomlaki Indians in California: the Hill Nomlaki and the River Nomlaki. The Hill Nomlaki are identified as the Paskenta Band of Nomlaki Indians. It is this group that has ancestral ties to the Orland area, which includes the project area. Euro-American contact with Native American groups living in the Central Valley of California began during the last half of the eighteenth century. At this time, the attention of Spanish missionaries shifted away from the coast, and its dwindling Native American population, to the conversion and missionization of interior populations.

4.18.2 Tribal Cultural Resources (XVII) Environmental Checklist and Discussion

		Less than		
	Potentially	Significant with	Less than	
Would the Project:	Significant	Mitigation	Significant	No
	Impact	Incorporated	Impact	Impact

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined

Would t	he Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a s ge sco wi	Public Resources Code Section 21074 as either site, feature, place, cultural landscape that is ographically defined in terms of the size and ope of the landscape, sacred place, or object the cultural value to a California Native nerican tribe, and that is:				
i)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or				
ii)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.				

A cultural resources survey, including tribal consultation, has not been completed for the Project site. As such, there is a potential for the Project to impact tribal cultural resources on the on the site. The extent of this potential impact has not been determined at this time. As such, this will be discussed in the EIR.

4.19 Utilities and Service Systems

4.19.1 Environmental Setting

The City of Orland Public Works Department is responsible for water, wastewater, and storm drainage for the City. The City contracts with Waste Management to provide solid waste collection services in the city.

Water Service

The source of water supply for Orland is groundwater pumped from six wells that produce between 350 and 1,090 gallons per minute (gpm). The wells are located throughout the City and range in depth from 150 - 400 feet. Gravity flow from an 80,000-gallon elevated storage tank provides the water pressure in the City. The water transmission and distribution systems consist of approximately 34 miles of pipeline ranging in diameter from 4-10 inches. The water system is operated at 50-65 pounds per square inch (psi) pressure under normal demand. The six wells are capable of producing 5,130 gpm at 55 psi system pressure. The average daily water demand per housing unit equivalent (HUE) is 571 gallons. The commercial HUE is 3,985 gpd, while the high-density residential HUE is 255 gpd (Orland 2015).

City water is obtained from the Colusa Groundwater Subbasin. There is not a regulated limit to the amount of groundwater that can be pumped by the various groundwater users, including the City of Orland, in this subbasin. The only limitation to groundwater extraction would be the to the City's water supply would be the pumping capacity of the six wells and the availability of water. As discussed in Section 4.10, the estimated storage capacity of the groundwater subbasin to a depth of 200 feet is approximately 13,025,887 acre-feet or 4,244.5 billion gallons. Estimates of groundwater extraction for the Colusa Subbasin are based on surveys conducted by the California DWR during 1993, 1994, and 1999. Surveys included land use and sources of water. Estimates of groundwater extraction for agricultural, municipal, and industrial, and environmental wetland uses are 310,000; 14,000; and 22,000 acre-feet, respectively. Deep percolation from applied water is estimated to be 64,000 acre-feet. The DWR has not identified the Colusa Subbasin as overdrafted in its DWR Bulletin 118. Also, there has been no indication of any existing or anticipated overdraft condition in studies prepared by other entities (DWR 2006).

The DWR Groundwater Information Center Interactive Map Application (GICIMA) provides groundwater levels through the state. Among other things, this interactive on-line tool can illustrate the change in groundwater depth of a certain time period for a particular location, such as the City of Orland. According to the GICIMA information, the distance from groundwater to ground surface in the Project area has increased by approximately 20 feet between the spring of 2008 and the spring of 2018. In other words, the groundwater water surface was 60 feet below ground surface 2008 and was approximately 80 feet below ground surface in 2018 (DWR 2019). However, the depth to groundwater varies by location and rainfall. For example, at the end of the recent drought, from 2014 to 2017, the groundwater to ground surface depth was approximately 95 to 100 feet below the surface in the Fall of 2016 in the Project area while it was 60 to 70 feet below the surface in the eastern part of Orland (DWR 2019).

Wastewater

All sewage is collected and processed by the Orland Wastewater Facility. The facility utilizes a primary treatment process consisting of a bar-screen located at the headworks building with screened effluent disposed into a rotating series of four sewage disposal ponds located west of the airport. These four primary settling ponds, along with two specially lined and isolated brine ponds, are located on a 50-acre, City-owned parcel of land.

The wastewater facility is currently operating under Waste Discharge Requirements Order No. 96-129, which was adopted by the Central Valley Regional Water Quality Control Board on May 3, 1996. The City's Waste Discharge Requirements indicate that the design capacity in 1996 for the four stabilization ponds and disposal field was 2.1 million gallons per day (mgd), with an average domestic wastewater flow of 1.3 mgd (City of Orland 2010b). The City has recently updated the wastewater facility by adding the Blue Frog Aeration System to the facility's aeration ponds. The addition of the Blue Frog Aeration System allows for better wastewater processing.

According to the City's Public Works Department, the City's Wastewater Facility currently has an average flow of about 1.0 million gallons per day (mgd). The capacity of the collection system is 3.4 mgd (based on peak flow) and the facility's capacity is 2.1 mgd (based on average flows). Based on these numbers, the system is operating at approximately 50 percent of capacity (Orland 2018c). The City's estimated

population as of January 1, 2018 was estimated to be 7,932 (DOF 2018). Population estimates for 2019 have not been published by DOF yet. The wastewater facility can support a population of approximately 12,000 (Orland 2010b).

Storm Drainage

The City of Orland stormwater drainage system consists primarily of surface water conveyance utilizing curbs and gutters which lead to underground drainage pipes that eventually discharge into the Lely Aquatic Pond, the Stony Creek Basin Tributary Area, or onsite retention basin and leach field systems.

Approximately 80 percent of the City's area is served by, and discharges into, the Lely Aquatic Pond. The City Engineer estimates that this pond is capable of accommodating all storm events up to and including a 50-year storm (City of Orland 2010b). Storm events which exceed this return interval will cause some localized ponding of runoff throughout the City within street roadbeds. Should the groundwater table become elevated due to cumulative stormwater runoff and percolation (likely occurring in late winter through early spring), the Lely Aquatic Pond capacity decreases, thereby resulting in a situation where larger storm events may cause the pond to exceed its capacity. When this occurs, runoff flows southeasterly along East South Street (County Road 200) until it reaches the Tehama-Colusa Canal, which thereafter becomes a dike preventing further street flow (Orland 2010b).

Solid Waste

The City of Orland is a member of the Glenn County Waste Management Regional Agency. The California Department of Resources Recycling and Recovery (CalRecycle) provides solid waste disposal and recycling information for jurisdictions in the state, including the Glenn County Waste Management Regional Agency.

As shown in *Table 4.19-1*, the majority of the Agency's solid waste is disposed of at the Glenn County Landfill. According to the figures published by the CalRecycle (2019a), in 2017, the Glenn County Landfill received approximately 98.8 percent of the Agency's solid waste, or 19,999 tons (CalRecycle 2019a).

Table 4.19-1. Solid Waste Disposal Facilities Used by the Glenn County Waste Management Regional Agency

	Solid Waste Disposal (tons/year)			La	ndfill Informati	on
Destination Facility	2015	2016	2017	Remaining Capacity (cubic yards)	Remaining Capacity Date	Cease Operation Date
Altamont Landfill and Resource Recovery	4	-	-	65,400,000	12/31/2014	1/1/2025
Anderson Landfill, Inc	10	10	1	51,512,201	9/30/2012	1/1/2045
Foothill Sanitary Landfill	-	-	2	138,000,000	6/10/2010	12/31/2082
Forward Landfill, Inc.	9	10	103	22,100,000	12/31/2012	1/1/2020
Glenn County Landfill	19,956	21,186	19,759	866,521	2/28/2015	7/1/2016
Neal Road Recycling and Waste Facility	33	53	22	20,847,970	7/1/2009	1/1/2033

	Solid Waste Disposal (tons/year)			La	on	
Destination Facility	2015	2016	2017	Remaining Capacity (cubic yards)	Remaining Capacity Date	Cease Operation Date
North County Landfill & Recycling	-	2	-	35,400,000	12/31/2009	12/31/2048
Potrero Hills Landfill	16	174	83	13,872,000	1/1/2006	2/14/2048
Recology Hay Road	6	161	20	30,433,000	7/28/2010	1/1/2077
Recology Ostrom Road LF Inc.	1	18		39,223,000	6/1/2007	12/31/2066
Vasco Road Sanitary Landfill	1	-		7,379,000	10/31/2016	12/31/2023
Yolo County Central Landfill	-	110	4	n/a	n/a	1/1/2081
Yearly Total	20,038	21,724	19,999			
Average per Resident (lbs./day)	3.8	4.2	3.8			
Average per Employee (lbs./day)	12.6	13.4	12.3			

Source: CalRecycle 2019a, 2019b, and 2019c

4.19.2 Utilities and Service Systems (XVIII) Environmental Checklist and Discussion

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			\boxtimes	

Water

Development of the Project would increase the demand for water in the city. The Truck Service Center project's estimated annual water demand is approximately 1,500 gallons per day (gpd). The City's six wells are capable of producing 5,130 gallons per minute (gpm) at 55 psi system pressure (approximately 7.38 million gpd). The City's Water System Capacity Study (2014) identified a 2014 maximum daily demand of approximately 5,400 gpm and a combined maximum daily demand plus fire flow demand of approximately 7,900 gpm. Since that time, the City has developed the Eva Drive well, which is anticipated to produce between 1,000 gpm and 1,250 gpm of water. Generally, the City operates only two of the wells during the low water demand months and up to five during the high demand summer months, all running at about 60 percent capacity (Orland 2018c). The Truck Service Center project represents an increase of 0.000002 percent of the City's maximum potential pumping capacity. There is a ten-inch water

⁶ 1,500 gpd / 7.38 million gpd x 100 = 0.000002 percent

transmission line located in County Road HH adjacent to the Project site. All onsite water infrastructure would be installed by the Proposed Project. Therefore, the Truck Service Center project would have a less than significant impact to the City's water treatment or conveyance facilities.

Two parcels of the Proposed Project are currently developed with residential uses. However, with approval of the Proposed Project, these parcels would have the ability to convert to commercial uses. These two parcels, along with the northern most parcel (which is currently vacant), may result in a greater water demand as commercial uses generally use more water than residential uses in the City. According to the Orland Public Works Department, the average daily water demand per commercial housing unit equivalent (HUE) is 3,985 gpd (Orland 2015). Using this factor, the future commercial development on the three parcels has the potential to result in a commercial water demand of 11,955 gpd. Based on the City existing groundwater pumping ability and the fact that currently there is not a regulated limit on the amount of groundwater that can be extracted for the Colusa Groundwater Subbasin, the future commercial water demand of 11,955 gpd would not result in the need for additional City's water treatment or conveyance facilities. Additionally, no development projects are currently proposed for the three parcels and annexation does not require the connection to the City water system for existing uses. As such, the future commercial uses would have a less than significant impact to the City's water treatment or conveyance facilities.

Wastewater

According to the Project applicant, the proposed Truck Service Center would generate an estimated 1,200 gpd of wastewater. Wastewater generated by the Service Center would be conveyed to the City's Wastewater Facility for processing via existing sewer collection facilities located in County Road HH, adjacent to the Project site. As described previously, the current capacity of the plant is limited to 2.1 mgd; the Wastewater Facility treats an average 1.0 mgd of wastewater and is capable of treating up to 3.4 mgd during peak wet weather flow. Therefore, the addition of 1,200 gpd of Truck Service Centergenerated wastewater would not exceed the Wastewater Facility's capacity and would have a less than significant impact to the City's collection and treatment facilities.

According to the Orland Sewer Master Plan, commercial uses are equal to 5.4 housing equivalents (HE) per acre. A housing equivalent is defined as an "area that will produce the same amount of wastewater flow as one single family home within a low-density location" (Orland 2009). According to the City's Public Works Department, the average single-family home produces approximately 431 gpd of wastewater (Orland 2015). Based on this information, the future commercial uses of the Proposed Project would account for 14.1 HEs or 6,074.5 gpd of wastewater.⁸ This increased demand would represent a 0.6 percent increase over the existing demand or 0.4 percent of the 1.45 mgd remaining plant capacity. Since there is adequate capacity remaining at the Wastewater Facility to serve future commercial uses at the Project site,

 $^{^{7}}$ 3,985 gpd/HUE x 3 HUE = 11,955 gpd

⁸ Wastewater demand: 2.61 acres (as shown in Table 2.1-2) X 5.4 HE/acre = 14.1 HEs. 2.61 X 431 gpd of wastewater = 6,074.5 gpd of wastewater

the Proposed Project would not result in the need for new or expanded facilities. This impact would be considered less than significant.

Storm Drainage

The nearest existing stormwater drainage facilities are located at the intersection of Commerce Lane/County Road HH and Ide Street/County Road 13 at the northeast corner of the Project site. The Truck Service Center site improvements include the construction of curbs, gutters and sidewalks along County Road HH and County Road 13 adjacent to the site and the converting the existing canal at the northeast corner of the site to an underground storm drainage facility. The Truck Service Center site would be graded to direct stormwater flows to existing and proposed drainage facilities. All future commercial development would be required to provide curbs, gutters and sidewalks along their street frontage as required by City code. As such, the Proposed Project would not result in the need for new or expanded stormwater facilities. This impact would be considered less than significant.

Electric Power

Pacific Gas and Electric (PG&E) provides electrical services to the Project area through state-regulated public utility contracts. PG&E's ability to provide its services concurrently for each project is evaluated during the development review process. The utility company is bound by contract to update its systems to meet any additional demand. Existing electrical facilities are located on County Road HH, adjacent to the Project Site. No new PG&E electric facilities will be required to provide electricity to the Project. Therefore, the Project would have a less than significant impact in this area.

Natural Gas

Existing PG&E natural gas pipelines are located on County Road HH and County Road 13 adjacent to the Project site. All on-site lines would be required to be constructed by the Truck Service Center project or any future commercial projects as necessary. No new PG&E natural gas facilities would be required to be constructed to serve the site. As such, the Project would have a less than significant impact to natural gas facilities.

Telecommunications

Existing phone lines are located adjacent to the Project site. Telecommunication will be through existing company and personal cell phones. No new telecommunication facilities will be required to serve the Project.

Wo	ould the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				

Refe	r to Item a) above.				
Wo	ould the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
Refe	r to Item a) above				
Wo	ould the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?				
per e oper pour As sh dispe (CalR How lands	erding to CalRecycle (2019c), the estimated solid waste employee per day. Based on this information and an arration of the Truck Service center project, the Service Cands per day (lbs/day) or 16.9 tons annually. 9 nown in <i>Table 4.19-1</i> , the Glenn County Landfill, which cosal, has a cease operation date of July 1, 2016. This datecycle 2019d). Once this facility is closed, the City will ever, the Proposed Project would not substantially increased by the Proposed Project. This is a less than significant date of July 1, 2016.	is the City's ate has been have to find rease solid weely minor a	main disposal single extended until so an alternative description and the city amounts of wastern as the city amounts of wastern and the city and	nployees at imately 92.4 te for solid vometime in isposal site.	full vaste 2020
Wo	ould the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Comply with federal, state, and local statutes and management and reduction regulations related				

 $^{^{9}}$ 92.4 lbs/day X 365 days / 2000 lbs/ ton = 16.9 tons per year.

The Proposed Project is required to comply with all state and federal statutes regarding solid waste. This impact is considered less than significant.

4.20 Wildfire

4.20.1 Environmental Setting

The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents), and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point, while fuels such as trees have a lower surface area to mass ratio and require more heat to reach the ignition point.

The Project site is not in an area designated by California Department of Forestry and Fire Protection (2007) as a Fire Hazard Severity Zone. Furthermore, no Very High Fire Hazard Severity Zones are located nearby. Finally, the location of the Project site makes it readily accessible by emergency personnel and vehicles in the event of a wildland fire. For these reasons, this impact would be less than significant.

4.20.2 Wildfire (XX) Environmental Checklist and Discussion

land	cated in or near state responsibility areas or ls classified as very high fire hazard severity es, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?				\boxtimes
(200 near	Project site is not in an area designated by California 7) as a Fire Hazard Severity Zone. Furthermore, no Verby. Also, the Project site is not located in a state respuis area.	ery High Fire	Hazard Severity	Zones are lo	cated
If lo	cated in or near state responsibility areas or		Less than		
land	ls classified as very high fire hazard severity es, would the Project:	Potentially Significant Impact	Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
land	ls classified as very high fire hazard severity	Significant	Mitigation	Significant	

in this area.

(2007) as a Fire Hazard Severity Zone. Furthermore, no Very High Fire Hazard Severity Zones are located nearby. Also, the Project site is not located in a state responsibility area. The Project would have no impact

land	ocated in or near state responsibility areas or ds classified as very high fire hazard severity es, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
(200	Project site is not in an area designated by California 07) as a Fire Hazard Severity Zone. Furthermore, no Verby. The Project would have no impact in this area.	•	•		
(200 near	07) as a Fire Hazard Severity Zone. Furthermore, no Ve	•	•		

The Project site is not in an area designated by California Department of Forestry and Fire Protection (2007) as a Fire Hazard Severity Zone. Furthermore, no Very High Fire Hazard Severity Zones are located nearby. The Project would have no impact in this area.

4.21 Mandatory Findings of Significance

4.21.1 Mandatory Findings of Significance (XIX) Environmental Checklist and Discussion

Doe	es the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
	iscussed in Sections 4.4 Biological Resources and 4.5 C potential impacts to these resources. These areas will			ed Project m	nay
Doe	es the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	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)?	\boxtimes			
regic	ementation of the Proposed Project, in conjunction wi on, may have the potential to result in cumulatively co ulative impacts will be discussed in the EIR.		-		
Doe	es the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Have environmental effects that will cause substantial adverse effects on human beings,	\boxtimes			

SECTION 5.0 LIST OF PREPARERS

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