CITY OF ORLAND

SKP RANCH, LLC. PROJECT

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Prepared for:

CITY OF ORLAND
815 FOURTH STREET
ORLAND, CA 95963

Prepared by:

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JANUARY 2017

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1.0 INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This document is an Initial Study, with supporting environmental studies, which concludes that a Mitigated Negative Declaration is the appropriate California Environmental Quality Act (CEQA) document for the SKP Ranch, LLC. Project. This Mitigated Negative Declaration has been prepared in accordance with CEQA, Public Resources Code Section 21000 et seq., and the State CEQA Guidelines, California Code of Regulations Section 15000 et seq.

An initial study is conducted by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with CEQA Guidelines Section 15063, an environmental impact report (EIR) must be prepared if an initial study indicates that the proposed project under review may have a potentially significant impact on the environment which cannot be initially avoided or mitigated to a level that is less than significant. A negative declaration may be prepared if the lead agency also prepares a written statement describing the reasons why the proposed project would not have a significant effect on the environment and therefore why it does not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a negative declaration shall be prepared for a project subject to CEQA when either:

a) *The initial study shows there is no substantial evidence, in light of the whole record before the agency, that the proposed project may have a significant effect on the environment, or*

b) *The initial study identifies potentially significant effects, but:*

(1) *Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed negative declaration is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and*

(2) *There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.*

If revisions are adopted in the proposed project in accordance with CEQA Guidelines Section 15070(b), including the adoption of mitigation measures included in this document, a mitigated negative declaration is prepared.

1.2 LEAD AGENCY

The lead agency is the public agency with primary responsibility over a proposed project. Where two or more public agencies will be involved with a project, CEQA Guidelines Section 15051 provides criteria for identifying the lead agency. In accordance with CEQA Guidelines Section 15051(b)(1), "the lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." Based on the criteria above, the City of Orland (City) is the lead agency for the proposed SKP Ranch, LLC. Project.

1.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this Initial Study is to evaluate the potential environmental impacts of the proposed SKP Ranch, LLC. Project. This document is divided into the following sections:

1.0 Introduction – This section provides an introduction and describes the purpose and organization of the document.

2.0 Project Information – This section provides general information regarding the project, including the project title, lead agency and address, contact person, brief description of the project location, General Plan land use designation and zoning district, identification of surrounding land uses, and identification of other public agencies whose review, approval, and/or permits may be required. Also listed in this section is a checklist of the environmental factors that are potentially affected by the project.

3.0 Project Description – This section provides a detailed description of the proposed project.

4.0 Environmental Checklist – This section describes the environmental setting and overview for each of the environmental subject areas, evaluates a range of impacts classified as "no impact," "less than significant impact," "less than significant impact with mitigation incorporated," and "potentially significant impact" in response to the environmental checklist.

5.0 References – This section identifies documents, websites, people, and other sources consulted during the preparation of this Initial Study.

1.4 EVALUATION OF ENVIRONMENTAL IMPACTS

Section 4.0, Environmental Checklist, is the analysis portion of this Initial Study. The section provides an evaluation of the potential environmental impacts of the project. Section 4.0 includes 18 environmental issue subsections, including CEQA Mandatory Findings of Significance. The environmental issue subsections, numbered 1 through 18, consist of the following:

1. Aesthetics
2. Agriculture Resources
3. Air Quality
4. Biological Resources
5. Cultural Resources
6. Geology and Soils
7. Greenhouse Gases
8. Hazards and Hazardous Materials
9. Hydrology and Water Quality
10. Land Use and Planning
11. Mineral Resources
12. Noise
13. Population and Housing
14. Public Services
15. Recreation
16. Transportation/Traffic
17. Utilities and Service Systems
18. Mandatory Findings of Significance

Each environmental issue subsection is organized in the following manner:

The **Setting** summarizes the existing conditions at the regional, subregional, and local level, as appropriate, and identifies applicable plans and technical information for the particular issue area.

The **Checklist Discussion/Analysis** provides a detailed discussion of each of the environmental issue checklist questions. The level of significance for each topic is determined by considering the predicted magnitude of the impact. Four levels of impact significance are evaluated in this Initial Study:

No Impact: No project-related impact to the environment would occur with project development.

Less Than Significant Impact: The impact would not result in a substantial adverse change in the environment. This impact level does not require mitigation measures.

Less Than Significant With Mitigation Incorporated: An impact that may have a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project" (CEQA Guidelines Section 15382). However, the incorporation of mitigation measures that are specified after analysis would reduce the project-related impact to a less than significant level.

Potentially Significant Impact: An impact that is "potentially significant" but for which mitigation measures cannot be immediately suggested or the effectiveness of potential mitigation measures cannot be determined with certainty, because more in-depth analysis of the issue and potential impact is needed. In such cases, an EIR is required.

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2.0 PROJECT INFORMATION

1. **Project title:** SKP Ranch, LLC. Project

2. **Lead agency name and address:** City of Orland
815 Fourth Street
Orland, CA 95963

3. **Contact person and phone number:** Scott Friend, City Planner
(530) 865-1608

4. **Project location:** The proposed project is located in the City of Orland in Glenn County, California. The project area, which totals approximately 2.57 acres, is situated on APN 045-170-003 in Section 21 of Township 22 North, Range 3 West MDM, in Glenn County, California (Latitude 39°44'59.54"N, Longitude 122°12'33.97"W). The project address is 6388 Commerce Lane. (See **Figure 3.0-1** for project location.)

5. **Project sponsor's name and address:** SKP Ranch, LLC.
14091 Lakeshore Drive
Clearlake, CA 95422

6. **General Plan designation:** Commercial (C)

7. **Zoning:** Current: Open Space (O-S)
Proposed: Highway Service Commercial (C-H)

8. **Description of project:** A request from SKP Ranch for a Zone Change from Open Space (O-S) to Highway Service Commercial (C-H) to allow for commercial land use(s) to occur on APN 045-170-003. Additionally, the applicant has submitted an application for Site Plan Review, requesting approval for the construction of a new 45,910-square-foot, four-story hotel with 80 guest rooms and an accompanying 6,000-square-foot high-turnover, sit-down restaurant.

   The proposed project site is predominantly vacant though contains a residential structure and various outbuildings proposed for demolition.

9. Surrounding land uses and setting:

The project site is located in an urban/agricultural interface area at the western edge of the Orland city limits. The site is bordered on the east and south by agricultural land and scattered single-family homes. To the east is the Pilot Flying J Travel Center property which includes both heavy truck and automobile fueling stations, a fast food restaurant, a convenience store, and a trucker's lounge. To the north is vacant land, a few single-family homes, a commercial use, and a mobile home park.

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

- California Department of Fish and Wildlife, Region 2
- California Department of Transportation, District 3
- Regional Water Quality Control Board, Central Valley Region (Region 5)
- Glenn County Air Pollution Control District
- Glenn County Environmental Health
- State Water Resources Control Board
- US Army Corps of Engineers
- US Fish and Wildlife Service

11. Environmental factors potentially affected:

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

☒ Aesthetics	☐ Agriculture Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Geology and Soils
☐ Greenhouse Gases	☐ Hazards and Hazardous Materials	☐ Hydrology and Water Quality
☐ Land Use and Planning	☐ Mineral Resources	☒ Noise
☐ Population and Housing	☒ Public Services	☐ Recreation
☒ Transportation/Traffic	☐ Utilities and Service Systems	☐ Mandatory Findings of Significance

12. Determination: (to be completed by the lead agency)

On the basis of this initial evaluation:

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

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

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

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

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

Signature

1/3/2017
Date

Peter R. Carr
Printed Name

City of Orland
Lead Agency

City Manager
Title

3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

The proposed project is located in the City of Orland, California. Orland is situated in Glenn County, in Northern California's Sacramento Valley, approximately 100 miles north of Sacramento. The city is approximately 16 miles north of Willows and approximately 22 miles west of Chico. Interstate 5 (I-5) passes along the western boundary of Orland, while State Route (SR) 32 passes through the center of the city on its way east toward Chico. The project site, which totals approximately 2.57 acres, is located at the northwest corner of Commerce Lane and Ide Street and across the street from the Flying J Travel Center (see **Figure 3.0-1** for project location).

The project site is accessed via Newville Road to Commerce Lane, and is proposed to include site access along Commerce Lane and Ide Street.

3.2 PROJECT SETTING

The proposed project site contains one residential unit with the balance of the property being vacant. The site has been previously disturbed from historic agricultural activities, which includes grading and disking. The site, located toward the western edge of the Orland city limits, is bordered on the south by Ide Street and vacant land and rural residences beyond. To the west are agricultural land and rural residences, and to the north lies vacant lands with rural residences beyond. To the east of the site is a Flying J Travel Center with Interstate 5 beyond.

The project site is owned by SKP Ranch, LLC. Under the City's jurisdiction, Assessor Parcel Number 045-170-003 is designated Commercial by the City General Plan and is zoned Open Space (O-S). As defined by the General Plan, the Commercial designation is intended to accommodate a range of uses including retail stores, restaurants, professional and medical offices, large office complexes, light manufacturing plants, outdoor recreation facilities, hotels, and other uses involving the sale of a product or a service (City of Orland 2010a).

PROJECT HISTORY

The proposed project site is predominantly vacant, though contains a residential structure proposed for demolition. As previously described, the project site has been previously disturbed from past agricultural activities and is located in an area that has historically been used for agricultural and rural residential purposes.

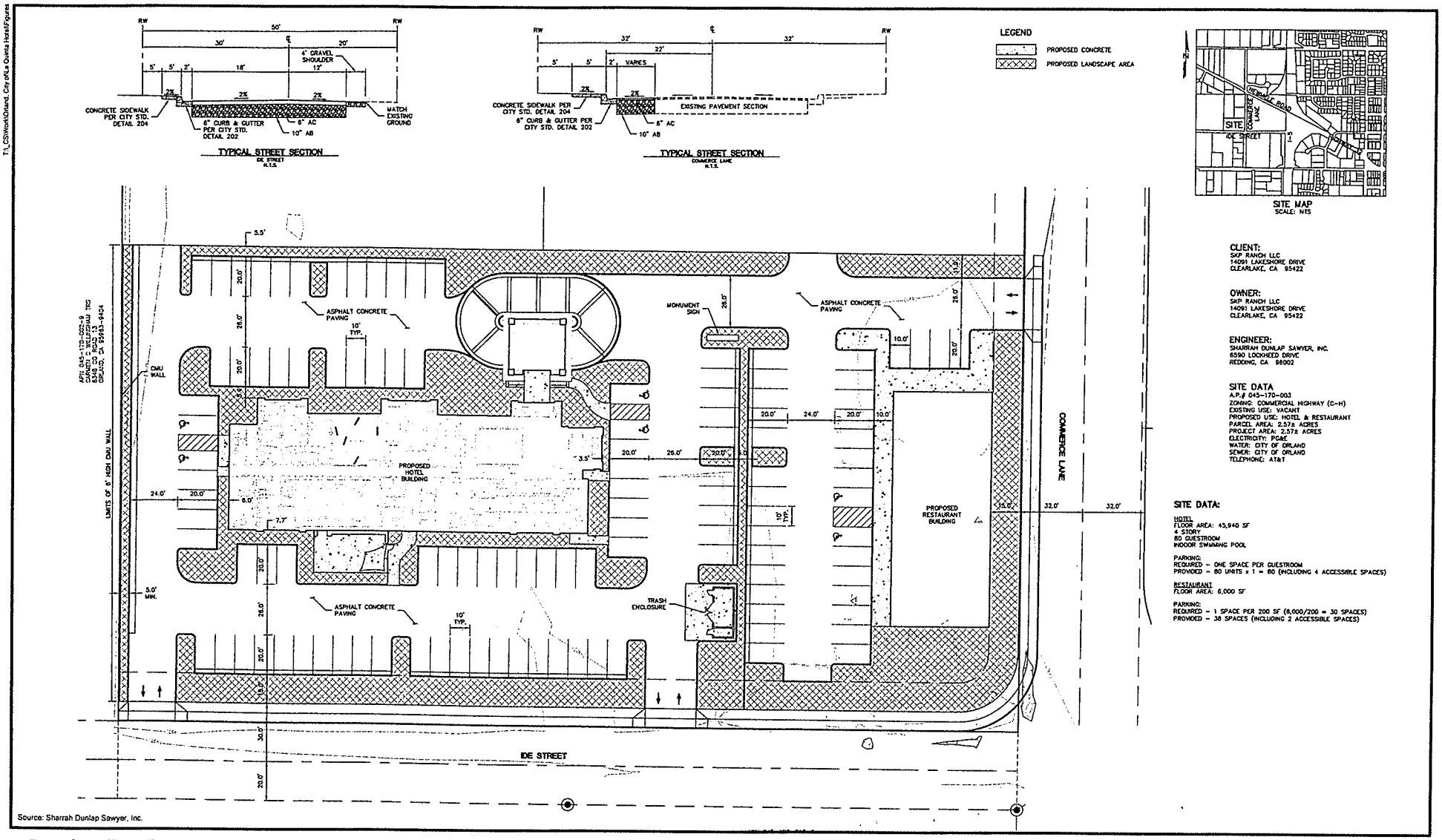
In 2014, the project site, in conjunction with an additional 17.06 acres in the vicinity, were proposed for annexation into the City of Orland. The potential environmental effects associated with this proposed annexation were identified and evaluated in the *Pilot Flying J Travel Center and Westside Annexation Area Project Draft Environmental Impact Report* (SCH#2014102084) (City of Orland 2015). Specifically, this Draft Environmental Impact Report (DEIR) analyzed two components: (1) the annexation by the City of Orland of a total of six parcels, including the proposed 2.57-acre SKP Ranch, LLC. project site; (2) the development of a commercial land use that could have accommodated a 44,000-square-foot hotel; and (3) the development of a Pilot Flying J Travel Center on 7.5 acres adjacent to the SKP Ranch, LLC. project site, across Commerce Lane (City of Orland 2015).

The development of a Pilot Flying J Travel Center on 7.5 acres was analyzed in the DEIR at a project level. Project-level analysis in EIRs examines the environmental impacts of a specific development project and focuses primarily on the changes in the environment that would result from the development project. The remaining 12.13 acres of annexation lands, including the 2.57-acre project site, were not associated with any specific development proposal at the time

the DEIR was written and were therefore analyzed for environmental impacts at a programmatic level, which focused primarily on a series of actions that could be characterized as one large project as logical parts in the chain of contemplated actions. In other words, while the 12.13 acres of annexation lands contained no specific development proposals at the time of the DEIR, it was reasonable to assume that the action of annexation into the City would instigate future development proposals, and thus the 12.13 acres, including the 2.57-acre project site, were evaluated programmatically for potential environmental impacts.

In 2015, these 12.13 acres, which include the SKP Ranch, LLC. project site, were approved for annexation into the City's jurisdiction in conjunction with the Pilot Flying J Travel Center. This total acreage was zoned Open Space (O-S). In 2016, the Orland City Council allowed subdivision of a portion of this acreage into four parcels at the request of owner SKP Ranch. One of these four new parcels, the 2.57-acre project site at the northwest corner of Commerce Lane (formerly County Road HH) and Ide Street (formerly County Road 13), is currently proposed to accommodate a new 45,910-square-foot, four-story hotel with 80 guest rooms and an accompanying 6,000-square-foot, high-turnover, sit-down restaurant, and is thus the subject property of this environmental analysis. As previously mentioned, the Pilot Flying J Travel Center DEIR analyzed the development of a commercial land use that could have accommodated a 44,000-square-foot hotel. Since the proposed hotel is slightly larger, the potential impacts are reanalyzed in this environmental analysis.

Utilizing the provisions established via CEQA Guidelines Section 15150, Incorporation by Reference, this Initial Study will utilize and draw upon the analysis and conclusions of the previously completed *Pilot Flying J Travel Center and Westside Annexation Area Project Draft Environmental Impact Report* (City of Orland 2015), where appropriate. For example, while the DEIR did not specifically analyze the environmental effects of a hotel and restaurant on the 2.57-acre proposed project site, certain CEQA-related environmental topic areas, such as geologic resources and aesthetic resources, are impacted similarly regardless of the type of land use proposed.



Source: Sharrah Dunlap Sawyer, Inc.

0 20 40
FEET

FIGURE 3.0-2
Site Plan

Michael Baker INTERNATIONAL

T:_CS\Work\Orland, City of\La Quinta Hotel\Figures

Source: KD Anderson & Associates, Inc.

Not To Scale

FIGURE 3.0-1
Project Location

Michael Baker INTERNATIONAL

3.3 PROJECT OVERVIEW

The project requires the approval of a Zone Change from Open Space (O-S) to Highway Service Commercial (C-H) to allow for commercial land uses to occur on the project site, as well as a proposed Site Plan to allow for the construction of a new 45,910-square-foot, four-story hotel with 80 guest rooms and an accompanying 6,000-square-foot, high-turnover, sit-down restaurant. In addition, the project is proposing to demolish an existing residence on the site. At completion, the project site would be totally covered with a hotel building, restaurant building, +/- 118 parking spaces, internal circulation driveways, and several landscaped areas.

PROJECT SITE IMPROVEMENTS

The project site is a previously disturbed, mostly vacant lot, though containing one residence. The site has been used over the years for agricultural activities, though most recently has simply existed as predominantly fallow land. The project proposes the construction of a new 45,910-square-foot, four-story hotel with 80 guest rooms and an accompanying 6,000-square-foot, high-turnover, sit-down restaurant.

Direct access to the site would be provided via Newville Road to Commerce Lane, and is proposed to include site access along Commerce Lane and Ide Street. The Traffic Impact Assessment prepared for the project anticipates that project operations would result in an average of 963 vehicle trips per day (KD Anderson 2016).

PROJECT CONSTRUCTION

It is anticipated that construction will begin during the year 2017. A variety of equipment and vehicles will be used during construction, potentially including backhoes, compacters, and air compressors. On-site parking will be provided for all construction-related vehicles and traffic. Construction work will generally occur during normal daylight construction hours, Monday through Friday, in compliance with City of Orland construction noise ordinance requirements.

PROJECT OPERATION

Once construction is completed, the hotel would operate 24 hours a day, 7 days a week, in order to adequately service overnight guests. The proposed restaurant is also anticipated to operate seven days a week. The proposed main entrance to the SKP Ranch, LLC. would be located off Commerce Lane, though site entrance and exits would also be located off Ide Street at two separate driveways, as shown in **Figure 3.0-2**. The hotel and restaurant would be separated by approximately 150 feet of parking lot and landscaping.

As shown in **Figure 3.0-3**, the hotel's entrance would have landscaping and pedestrian facilities. The proposed height elevations associated with the proposed four-story hotel would exceed the 40-foot maximum height listed in Chapter 17.44 of the Orland Municipal Code. Therefore, a use permit for additional height has been requested to address over height and the elevator shaft height. The hotel would operate year round, with no shared ownership or residential uses. It would be geared toward visitors, as would the proposed restaurant on site. The hotel would potentially provide space for occasional social events and small gatherings.

According to ratios provided by the US Green Building Council (USGBC), a 45,910-square-foot hotel and 6,000-square-foot, high-turnover, sit-down restaurant can be expected to generate approximately 86 jobs (2008).

Potable water for the proposed project would be supplied by the City of Orland. The project would connect to the existing 10-inch water main located within the Commerce Lane right-of-way. All on-site water lines would be provided by the project. Based on water use characteristics of similar projects, the estimated water demand for the proposed project is anticipated to be approximately 13,960 gallons per day (gpd). Wastewater collection and treatment would also be supplied by the City of Orland. The project would connect to an existing sanitary sewer trunk line located within the Commerce Lane right-of-way. All on-site sewer lines, filters, and grease traps would be provided by the project applicant. Estimated wastewater flow for the proposed project is approximately 6,034 gpd.

The storm drain system would be designed to limit peak runoff during the 10-, 25-, and 100-year storm events to pre-development levels or below. The storm drain system would be sized and backfilled with drain rock, wrapped in filter fabric, to accomplish three purposes: (1) allow runoff to infiltrate the ground based on predetermined infiltration rates from the geotechnical report; (2) provide adequate storage so any runoff that leaves the property will be metered at a rate not exceeding pre-development rates; and (3) the rock and filter fabric will serve to treat runoff to improve the quality of the runoff.

T:_CS\Work\Orland, City of\La Quinta Hotel\Figures

Source: KD Anderson & Associates, Inc.

Not To Scale

FIGURE 3.0-3
Hotel Facade

Michael Baker
INTERNATIONAL

3.4 PROJECT APPROVALS

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:

- Adoption of the Initial Study/Mitigated Negative Declaration
- Approval of project site rezone from O-S, Open Space to C-H, Highway Service Commercial
- Approval of architectural designs and landscape plans
- Grading and building permits
- Site Plan Approval
- Use Permit for Height Waiver

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, Region 2
- California Department of Transportation, District 3
- Regional Water Quality Control Board, Central Valley Region (Region 5)
- Glenn County Air Pollution Control District
- Glenn County Environmental Health
- State Water Resources Control Board
- US Army Corps of Engineers
- US Fish and Wildlife Service

3.5 RELATIONSHIP OF PROJECT TO OTHER PLANS

PROJECT RELATIONSHIP TO EXISTING PLANNING DOCUMENTS

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. As previously stated, the City General Plan designates the project site as Commercial. The City established the Commercial land use designation to provide for a range of uses including retail stores,

restaurants, professional and medical offices, large office complexes, light manufacturing plants, outdoor recreation facilities, hotels, and other uses involving the sale of a product or a service (City of Orland 2010a).

Zoning Ordinance

The Zoning Ordinance implements the policies of the General Plan by classifying and regulating the land uses and associated development standards in the city. The project site is currently zoned Open Space (O-S).

4.0 ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.1 AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

SETTING

Scenic 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. No state scenic highways pass through the vicinity.

Much of the land surrounding the project site is a combination of commercial development to the north, I-5 to the east, and rural development to the west and south. The project site and surrounding parcels are designated as Commercial in the Orland General Plan and either Highway and Visitor Service Commercial, Service Commercial, or Suburban Residential in the Glenn County General Plan. The project would be consistent with the Orland General Plan land use designation and the Glenn County General Plan land use designation for the site.

DISCUSSION OF IMPACTS

a) *No Impact*. 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. Therefore, the proposed project would have no impact on scenic vistas.

b) *No Impact*. Due to the lack of scenic resources on the project site, the proposed project would have no impact on scenic resources. Furthermore, there are no state or locally designated scenic highways in the project area.

c) *Less Than Significant Impact*. The project site is located in the western portion of the city and is bound by a combination of commercial development to the north, I-5 to the east, and rural development to the west and south. The project site and surrounding parcels are designated as Commercial in the Orland General Plan and either Highway and Visitor Service Commercial, Service Commercial, or Suburban Residential in the Glenn County General Plan. The proposed project would have a less than significant impact to the existing visual character or quality of the site and its surroundings.

d) *Less Than Significant Impact*. No new light or glare sources visible beyond the project site would be introduced during construction of the proposed project. 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 project 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.

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, highways, and I-5, limits the height of light poles to the height of the main building, and requires suitable lights to properly illuminate any parking area.

Therefore, the proposed project would have a less than significant impact on aesthetics.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.2 AGRICULTURE RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997), prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use?	☐	☐	☐	☒
d) Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 1222(g), timberland (as defined in Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined in Public Resources Code Section 51104(g))?	☐	☐	☐	☒
e) Result in the loss of forestland or conversion of forestland to non-forest use?	☐	☐	☐	☒

SETTING

The California Department of Conservation manages a Farmland Mapping and Monitoring Program (FMMP), which identifies and maps significant farmland. The classification of farmland as Important Farmland (i.e., 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 California Department of Conservation's (DOC) (2014a) online Important Farmland Finder mapping program identifies the site as Farmland of Local Importance. The DOC (2014b) also shows that the site and all surrounding adjacent lands are not under Williamson Act contracts.

The project site is designated commercial under the General Plan. The project site is currently zoned for open space, but the proposed rezone is highway service commercial.

DISCUSSION OF IMPACTS

a) *Less than Significant*. As identified on the DOC's online Important Farmland Finder mapping program, the project area is considered Farmland of Local Importance. The City of Orland General Plan EIR (City of Orland 2010b) analyzed the environmental effects associated with agricultural conversion as a result of urban development in the city limits and sphere of influence, which encompasses the project site. As determined by Impacts 4.2.1 (Loss of Agricultural Land) and 4.2.2 (Changes in Existing Land Uses Resulting in the Conversion of Agricultural Land) of the Addendum to the City of Orland General Plan EIR, agricultural

conversion related impacts are significant and unavoidable. Therefore, agricultural conversion to urban uses on the site has been previously evaluated and the project will not result in impacts beyond those determined in the Addendum to the City of Orland General Plan EIR. Therefore, impacts are less than significant.

b) *No Impact*. According to the DOC (2014b), the project site is not under a Williamson Act contract, nor are any lands located near the project site subject to a Williamson Act contract. As such, implementation of the proposed project would not conflict with any existing Williamson Act contract lands.

c) *No Impact*. The project site does not contain any active agricultural uses or forestland, nor does it support trees that could be commercially harvested.

d) *No Impact*. See Response 4.2(c) above. The project site does not contain any forest resources, nor is it zoned for forest use.

e) *No Impact*. The project site is not used for agricultural or timber production purposes.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.3 AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

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 mean 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 US Environmental Protection Agency (EPA) 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 (NO_x), sulfur dioxide (SO_2), 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 2016). However, the county is designated a nonattainment area for state particulate matter less than 10 microns (PM_{10}) standards (CARB 2016). The county is designated an attainment or unclassified area for all other state ambient air quality standards (CARB 2016).

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

DISCUSSION OF IMPACTS

a) *No Impact*. As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan that demonstrates the means to attain the federal standards. The State Implementation Plan 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. Glenn County is identified as being in attainment for all federal air quality standards (CARB 2016). As such, Glenn County is not subject to an air quality plan.

b) *Less Than Significant Impact*. Implementation of the proposed project could result in air quality impacts during project construction and operation. The GCAPCD has no established air pollutant emission thresholds under CEQA for the assessment of air quality impacts. Therefore, the proposed project will be compared to the significance thresholds established by the Mendocino County Air Quality Management District (MCAQMD), which were established under CEQA for the assessment of air quality impacts. While air quality standards established in Mendocino County are not binding on Glenn County, they are instructive for comparison purposes. The MCAQMD thresholds are consistent with the California Clean Air Act. The thresholds of significance are summarized in **Table 4.3-1**.

TABLE 4.3-1
MENDOCINO COUNTY APCD THRESHOLDS OF SIGNIFICANCE (POUNDS PER DAY)

Threshold	ROG	NO_x	PM_{10}	$PM_{2.5}$
Construction	54	54	82	54
Operational	180	42	82	54

Source: MCAQMD 2010

Construction Emissions

The project would generate short-term emissions from construction activities such as demolition, site grading, asphalt paving, building construction, and architectural coatings (e.g., painting). Common construction emissions include fugitive dust from soil disturbance, portable auxiliary equipment, worker commute trips, and fuel combustion from mobile, heavy-duty, diesel- and gasoline-powered equipment. During construction, fugitive dust, the dominant source of PM_{10} and $PM_{2.5}$ emissions, would be generated when wheels or blades disturb surface materials. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. Demolition can also generate PM_{10} and $PM_{2.5}$ emissions. Off-road construction equipment is often diesel-powered and can be a substantial source of NOx emissions, in addition to PM_{10} and $PM_{2.5}$ emissions. Worker commute trips and architectural coatings are dominant sources of ROG emissions. Predicted maximum daily construction-generated emissions for the project are summarized in **Table 4.3-2**. Project construction is assumed to take approximately 11 months.

TABLE 4.3-2
CONSTRUCTION-RELATED CRITERIA POLLUTANT AND PRECURSOR EMISSIONS (POUNDS PER DAY)

Construction Phase	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
2017	11.76	44.59	37.08	0.06	7.98	4.60
2018	10.91	39.49	35.19	0.06	3.20	2.41
Maximum Daily Emissions	**11.76**	**44.59**	**37.08**	**0.06**	**7.98**	**4.60**
GCAPCD/MCAQMD Thresholds	**54**	**54**	**None**	**None**	**82**	**54**
Exceed Threshold?	No	No	N/A	N/A	No	No

*Source: CalEEMod, version 2016.3.1. See **Appendix 4.3** for daily emission model outputs.*

As shown in **Table 4.3-2**, short-term daily emissions associated with the construction of the project would not exceed the significance thresholds. Therefore the impact is less than significant.

Operational Emissions

Implementation of the project would result in long-term operational emissions of criteria air pollutants and ozone precursors. Project-generated increases in emissions would be predominantly associated with motor vehicle use. To a lesser extent, area sources, such as landscape maintenance equipment and architectural coatings, would also contribute to overall increases in emissions. Predicted maximum daily emissions are summarized in **Table 4.3-3**.

TABLE 4.3-3
LONG-TERM OPERATIONAL EMISSIONS (POUNDS PER DAY)

Source	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Summer Emissions						
Area Source	1.47	0.00	0.02	0.00	0.00	0.00
Energy Use	0.07	0.65	0.55	0.00	0.05	0.05
Mobile Source	2.99	13.99	22.47	0.06	3.15	0.90
Total	**4.53**	**14.64**	**23.04**	**0.06**	**3.20**	**0.95**
GCAPCD/MCAQMD Thresholds	**180**	**42**	**None**	**None**	**82**	**54**
Exceed Daily Threshold?	**No**	**No**	**N/A**	**N/A**	**No**	**No**
Winter Emissions						
Area Source	1.47	0.00	0.02	0.00	0.00	0.00
Energy Use	0.07	0.65	0.55	0.00	0.05	0.05
Mobile Source	2.33	14.50	23.22	0.05	3.16	0.90
Total	**3.87**	**15.15**	**23.79**	**0.05**	**3.21**	**0.95**
GCAPCD/MCAQMD Thresholds	**180**	**42**	**None**	**None**	**82**	**54**
Exceed Daily Threshold?	**No**	**No**	**N/A**	**N/A**	**No**	**No**

*Source: CalEEMod, version 2016.3.1. See **Appendix 4.3** for daily emission model outputs.*

As shown in **Table 4.3-3**, operational daily emissions associated with the development of the project would not exceed the significance thresholds. Therefore the operational impact is less than significant.

c) *Less Than Significant Impact*. As noted above, Glenn County is currently in nonattainment for state PM_{10} standards. Due to the region's nonattainment status, if project-generated emissions of PM_{10} exceed the long-term thresholds, then the project's cumulative impacts would be considered significant. As discussed in Impact b), operational significance thresholds would not be surpassed; this results in operational air quality impacts that are considered less than significant. Therefore, cumulative impacts would also be considered less than significant.

d) *Less Than Significant Impact*. Sensitive land uses are defined as facilities or land uses that include members of the population who 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 day care centers. 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, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

Air Toxics Generated During Construction Activities

The project site is bordered by agricultural land and scattered single-family homes on the east and south and vacant land and a few single-family homes to the north. Sources of construction-related air toxics potentially affecting these sensitive receptors include off-road diesel-powered equipment. Construction would result in the generation of diesel particulate matter (diesel PM) emissions from the use of off-road diesel equipment required for grading and excavation, paving, and other construction activities. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to toxic air contaminant emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer.

The use of diesel-powered construction equipment would be temporary and episodic and would occur over several locations isolated from one another. The duration of exposure would be short and exhaust from construction equipment dissipates rapidly. Current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 30, 40, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. Additionally, construction activities would occur in an area of less than 5 acres. CARB generally considers construction projects contained in a site of such size to represent less than significant health risk impacts due to (1) limitations on the off-road diesel equipment able to operate and thus a reduced amount of generated diesel PM, (2) the reduced amount of dust-generating ground disturbance possible compared to larger construction sites, and (3) the reduced duration of construction activities compared to the development of larger sites. Furthermore, construction would be subject to and would comply with California regulations limiting the idling of heavy-duty construction equipment to no more than 5 minutes, which would further reduce nearby sensitive receptors' exposure to temporary and variable diesel PM emissions. For these reasons, diesel PM generated by construction activities, in and of itself, would not be expected to expose sensitive receptors to substantial amounts of air toxics and would be less than significant.

Air Toxics Generated During Project Operations

Development projects that involve numerous heavy-duty truck trips on-site create substantial quantities of diesel PM emissions, and therefore can negatively affect sensitive land uses. Operations associated with the project include a 45,910-square-foot hotel and a 6,000-square-foot, high-turnover, sit-down restaurant, which could potentially require the use of delivery trucks during normal operations. According to CAPCOA's (2009) Health Risk Assessments for Proposed Land Use Projects, operations that require fewer than 100 delivery trucks daily are not considered a potential health risk.

A review of the project site plan shows no heavy-duty truck loading docks or loading areas. Therefore, the proposed commercial buildings would not receive deliveries from heavy-duty trucks due to the lack of facilities to accommodate them. Rather, the hotel and restaurant would rely on medium-duty delivery vehicles, which do not emit as much diesel PM. Daily deliveries to the hotel and restaurant would not require 100 delivery trucks a day to operate.

In addition, the EPA and the National Highway Transportation Safety Administration (NHTSA) announced fuel economy standards for medium- and heavy-duty trucks, which apply to vehicles in model years 2014–2018. The NHTSA has adopted standards for fuel consumption tailored to each of three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA (2011), this program will reduce fuel consumption, and thus air pollutant emissions, for affected vehicles by 6 percent to 23 percent. While this analysis does not rely on this program for purposes of mitigating impacts, this program should help further reduce the long-term operational impacts of the project.

For these reasons, diesel PM generated by operational activities would not be expected to expose sensitive receptors to substantial amounts of air toxics and would be less than significant.

e) *Less Than Significant Impact*. During construction, the proposed project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources.

Major operational sources of odor-related complaints by the general public commonly include wastewater treatment facilities, landfill disposal facilities, food processing facilities, agricultural activities, and various industrial activities such as petroleum refineries, chemical and fiberglass manufacturing, painting/coating operations, feedlots/dairies, composting facilities, landfills, and transfer stations. The project does not include any of these land uses or similar land uses. Therefore, the impact is less than significant.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.4 BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.), through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

SETTING

Vegetative communities are assemblages of plant species that occur in the same area and are defined by species composition and relative abundance. The project site is composed entirely of annual grassland. Habitat (vegetative community) classifications were assigned using the California Wildlife Habitat Relationships System (CDFW 2014).

Annual grassland habitats are open grasslands dominated by annual plant species found from the flat plains of the Central Valley to the coastal mountain ranges of Mendocino County and in scattered locations across the southern portion of the state. In the project vicinity, this community is composed of primarily introduced annual species and includes orchard grass (*Dactylis glomerata*), Italian ryegrass (*Festuca perennis*), bromes (*Bromus* spp.), barleys (*Hordeum* spp.), filarees (*Erodium* spp.), and oats (*Avena* spp.), bentgrass (*Agrostis* sp.) and curly dock (*Rumex crispus*). A few small trees, including English walnut (*Juglans regia*), occur in the project site area. In addition, a row of oleander (*Nerium oleander*) hugs the eastern boundary of the project site.

Annual grasslands provide foraging habitat for a wide variety of wildlife species including raptors, seed-eating birds, small mammals, amphibians, and reptiles. Reptiles likely associated with this habitat type in the project area include western fence lizard (*Sceloporus occidentalis*) and common garter snake (*Thamnophis sirtalis*). Black-tailed jackrabbit (*Lepus californicus*), western harvest mouse (*Reithrodontomys megalotis*), Botta's pocket gopher (*Thomomys bottae*), and California vole (*Microtus californicus*) are mammals commonly found in this habitat type. Western meadowlarks (*Sturnella neglecta*) may breed in the grassland community in the project vicinity, while raptors likely use it for foraging.

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.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact with Mitigation Incorporated.* Implementation of project-related activities could result in substantial adverse effects, either directly or through habitat modifications, on Swainson's hawk and migratory birds.

   Although there are no known active nests within 1 mile of the project site, there are several records of Swainson's hawk nests scattered throughout agricultural lands in the project vicinity. The closest occurrence is approximately 3.5 miles southeast of the project site. According to the CDFW's (1994) *Staff Report Regarding Mitigation for Impacts to Swainson's Hawk* (Buteo swainsoni) *in the Central Valley of California*, loss of foraging habitat within 5 miles of active Swainson's hawk nests calls for mitigation in the form of providing 0.75 acre of habitat management lands for every 1 acre of foraging habitat lost. Since implementation of project-related activities will result in a loss of foraging habitat for this species, implementation of mitigation measure **MM 4.4.1** is required to reduce potential impacts to a less than significant level.

   Trees in the project vicinity are not large enough to provide suitable nesting habitat for raptors; however, the project vicinity provides suitable nesting habitat for migratory birds.

Nests may be located in trees or shrubs or on the ground. All native breeding birds (except game birds during the hunting season), regardless of their listing status, are protected under the Migratory Bird Treaty Act. As a result, vegetation clearing during the nesting season could result in direct impacts to nesting birds, should they be present. Construction could result in noise, dust, increased human activity, and other indirect impacts to nesting migratory bird species in the project vicinity. Potential nest abandonment and mortality to eggs and chicks, as well as stress from loss of foraging areas, would also be considered potentially significant impacts. If nesting migratory birds are present during project construction, the proposed project may cause direct mortality to migratory birds through removal of vegetation that contains active nests. Due to the presence of suitable habitat for these species, implementation of project-related activities may result in adverse impacts should the species be present in areas proposed for disturbance. In order to reduce potential impacts to a less than significant level, implementation of mitigation measure **MM 4.4.2** is required.

b) *No Impact.* Sensitive habitats include those that are of special concern to resource agencies and those that are protected under CEQA, Section 1600 of the Fish and Game Code, and Section 404 of the Clean Water Act. There are no sensitive habitats within the project area. Project-related activities are not anticipated to adversely affect riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations or by the CDFW or the USFWS. Therefore, the project is anticipated to have no impact on riparian habitat and sensitive natural communities.

c) *Less than Significant Impact.* While there are no wetlands on the project site, there is a man-made ditch feature on the parcel north of the project site. This feature is indirectly hydrologically connected to Black Butte Reservoir; however, implementation of project-related activities would not likely result in adverse impacts to federally protected waters should this feature be subject to Clean Water Act jurisdiction. Therefore, the impact is less than significant.

d) *Less Than Significant Impact.* The project vicinity may provide wildlife movement opportunities, as it is generally undeveloped open land; however, it does not support habitat or act as a major wildlife movement corridor that would require protection to preserve connection between habitat areas. Furthermore, I-5 is directly to the east, which further impairs any corridor function. As a result, a less than significant impact to the movements of any native resident or migratory wildlife corridors or the use of native wildlife nursery sites would occur as a result of the proposed project.

e) *No Impact.* There are currently no adopted or proposed local policies or ordinances that affect the proposed project. Therefore, no impact would occur.

f) *No Impact.* There are no adopted habitat conservation plans, natural community conservation plans, or any adopted biological resources recovery or conservation plans in the proposed project area. As such, no impact would occur.

Mitigation Measures

MM 4.4.1 **Swainson's Hawk Foraging Habitat.** Prior to issuance of grading permits, the applicant shall provide documentation to the City of Orland demonstrating that Swainson's hawk foraging habitat mitigation has been obtained at a ratio of 0.75 acre for each 1.00 acre of suitable foraging habitat lost. Suitable foraging habitat consists of row crops, forage crops, pasture, grasslands, or fallow fields that would be affected by construction activities. The applicant shall mitigate for loss of Swainson's hawk foraging habitat through (1)

payment of an in-lieu fee for off-site preservation of foraging habitat to a resource agency or a third-party organization acceptable to a resource agency, or (2) acquisition of an irrevocable instrument (e.g., deed restriction or easement) for preservation of foraging habitat on a property that provides habitat of equal or greater quality.

Timing/Implementation: *Prior to construction activities*

Enforcement/Monitoring: *City of Orland Planning Department*

MM 4.4.2 **Migratory Birds.** If clearing and/or construction activities would occur during the bird nesting season (February 15–August 15), preconstruction surveys (within 14 days of construction initiation) shall be conducted by a qualified biologist to identify active migratory bird nests. Preconstruction surveys must be performed by a qualified biologist for the purposes of determining presence/absence of active nest sites in the project area and a 200-foot buffer. If no active nests are found, no further mitigation is required. Surveys shall be repeated if construction activities are delayed or postponed for more than 30 days.

If active nest sites are identified within 200 feet of project activities, the applicant shall impose an exclusionary buffer for all active nest sites prior to commencement of any project-related activities to avoid construction- or access-related disturbances to nesting birds. An exclusionary buffer constitutes an area where project-related activities (i.e., vegetation removal, earthmoving, and construction) will not occur and shall be imposed within 100 feet of any active nest sites until the nest is deemed inactive by a qualified biologist. Activities permitted within the exclusionary buffer and the size (i.e., 100 feet) of exclusionary buffers may be adjusted through consultation with the City of Orland.

Timing/Implementation: *Reference to this requirement and to the MBTA will be included in the construction specifications. Preconstruction nest surveys will be conducted prior to the initiation of construction activities, as applicable.*

Enforcement/Monitoring: *City of Orland Planning Department*

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.5 CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

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.

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. A historical 1855 plat map of the area was viewed during this research. In 1855, nothing was present to plot on the map, but Stony Creek is evident as is a small drainage that would have been located east of the project area, probably where I-5 is currently located (NCRC 2015).

Recent activity was observed on the project site. The house on the site (current use agriculture and single-family home) and surrounding outbuildings appear to be of an older style, though there are modern fixtures and an electric meter. The concrete on the side of the house with the date 1950 impressed on it could indicate the house's age, yet it is more likely that this was poured after the house was built (NCRC 2015). Judging by the size of the grapefruit, tangerine, and orange trees in the side yard, the building could have been built before 1950.

According to the Northeast Information Center of the California Historical Resources Information System, no prehistoric or pre-contact archaeological sites are documented anywhere in the project-area vicinity, and no historic sites have been recorded within the project area or a one-quarter-mile vicinity.

Furthermore, the Native American Heritage Commission indicated an absence of cultural resources or known sacred land sites through its record search of the sacred lands files. The commission sent a list of Native American individuals and groups to contact regarding the project area. Letters were written to each of these Native American contacts. One response was received from the Enterprise Rancheria of Maidu Indians which stated that the area was not a Maidu area. No other Native American responses were received by the NCRC.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact*. As previously mentioned, there is a building on the property site that could have been built before 1950. This building, however, is not historically or culturally significant. Therefore, there are no historic buildings or other historic resources of concern located within the project area. The impact is less than significant.

b) *Less Than Significant Impact With Mitigation Incorporated*. An archaeological survey conducted for a project in the vicinity of the project area indicates that no archaeological resources have been identified near the project site (NCRC 2015). However, ground disturbance associated with site development has the potential to impact previously unknown, subsurface historic resources should any be present. Therefore, mitigation measure **MM 4.5.1** is provided below to reduce potential impacts to a level that is considered less than significant.

c) *Less Than Significant Impact With Mitigation Incorporated*. A paleontological survey was not completed for the project site. As such, the potential for paleontological resources on the site cannot be specifically determined. However, according to the City of Orland General Plan DEIR (2010b), a search of the University of California Museum of Paleontology collections database identified 21 paleontological resources in Glenn County. These resources primarily consisted of vertebrates and invertebrates. The database search did not identify any paleontological resources in the City's planning area; however, because of the abundance of paleontological resources in Glenn County, it is possible that these resources may exist on-site. Therefore, mitigation measure **MM 4.5.2** is provided below to address the potential for the discovery of any unrecorded or previously unknown resources.

d) *Less Than Significant Impact With Mitigation Incorporated*. Previous cultural resource investigations conducted for projects in the vicinity of the project area indicate that there is little likelihood for Native American archaeological sites, or burial sites, to be present in the area (NCRC 2015). Regardless, there is a possibility of the unanticipated and accidental discovery of human remains during ground-disturbing project-related activities. Therefore, mitigation measure **MM 4.5.3** is provided below to reduce potential impacts to a level that is considered less than significant.

Mitigation Measures

MM 4.5.1 If any prehistoric and/or historic resources or other indications of cultural resources are found during future development of the site, all work in the immediate vicinity of the find must stop and the City of Orland Planning Department shall be immediately notified. An archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be retained to evaluate the finds and recommend appropriate mitigation measures.

Timing/Implementation: *During construction activities and during operations*

Enforcement/Monitoring: *City of Orland Planning Department; project contractor*

MM 4.5.2 If any paleontological resources are found during future development of the site, all work in the immediate vicinity of the find must stop and the City of Orland Planning Department shall be immediately notified. A qualified paleontologist (i.e., one with a graduate degree in paleontology, geology, or a related field and having demonstrated experience in the vertebrate, invertebrate, or botanical paleontology of California) shall be retained to evaluate the finds and recommend appropriate mitigation measures.

Timing/Implementation: *During construction activities and during operations*

Enforcement/Monitoring: *City of Orland Planning Department; project contractor*

MM 4.5.3 If human remains are discovered during future development of the site, all work must stop in the immediate vicinity of the find and the Glenn County coroner shall be notified, per California Health and Safety Code Section 7050.5. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.

Timing/Implementation: *During construction activities and during operations*

Enforcement/Monitoring: *City of Orland Planning Department; project contractor*

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.6 GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

SETTING

As stated in the City's General Plan, geologic hazards such as earthquake shaking, landslides, and volcanic eruption are minimal and are not expected to be a major problem in the city (City of Orland 2003). Furthermore, according to the Orland General Plan Update EIR (2010b), the primary seismic hazard associated with the Orland planning area is minor ground shaking. The planning area 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 the city.

DISCUSSION OF IMPACTS

a)

i) *Less Than Significant Impact*. There are no known active or potentially active faults within or adjacent to the city. The closest active fault system is the 40-mile-long Willows fault, located about 10 miles west of the city. The California Geological Survey does not

identify Orland as a city affected by this fault or any other Alquist-Priolo Earthquake Fault Zone. Therefore, the impact is less than significant.

ii) *Less Than Significant Impact*. See Response 4.6(a)(i). According to the Orland General Plan Update EIR (2010b), the primary seismic hazard associated with the Orland planning area is minor ground shaking. Because the proposed project site is located in an area determined to have a low chance of seismic hazard and all projects in Orland are required to comply with the seismic building standards of the California Building Code, the potential for impacts resulting from strong seismic ground shaking is considered less than significant.

iii) *Less Than Significant Impact*. 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 all projects in Orland are required to comply with the seismic building standards of the California Building Code, the potential for impacts resulting from liquefaction is considered less than significant.

iv) *No Impact*. The project site has flat topography, indicating no potential for landslides.

b) *Less Than Significant Impact*. Future grading and site preparation activities associated with project development would remove topsoil, disturbing and potentially exposing the underlying soils to erosion from a variety of sources, including wind and water. However, the project site is flat, which would reduce the potential for substantial erosion. Because construction and the resulting potential erosion may affect water quality, any development involving clearing, grading, or excavation that causes soil disturbance on 1 or more acres is subject to a National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit. The proposed project would also be required to prepare and comply with an approved stormwater pollution prevention plan. The flat topography of the site and compliance with this requirement would reduce potential erosion impacts to a less than significant level.

c) *Less Than Significant Impact*. The potential for landslides on the project site was addressed under Response 4.6(a)(iv) and was determined to have no impact. The potential for lateral spreading, liquefaction, subsidence, and other types of ground failure or collapse was addressed under Response 4.6(a)(iii) and was determined to be less than significant.

d) *Less Than Significant Impact*. Expansive or shrink-swell soils are soils that swell when subjected to moisture and shrink when dry. Expansive soils typically contain clay minerals that attract and absorb water, greatly increasing the volume of the soil. This increase in volume can cause damage to foundations, structures, and roadways. While the clay content of project site soils in the vicinity of proposed improvements is currently unknown, standard procedures used in the construction of concrete footings as required by the California Building Code will reduce this potential impact to a level that is considered less than significant.

e) *No Impact*. The project would be connected to the City's sewer system. No septic tanks or alternative wastewater disposal systems are associated with the project. Therefore, there would be no impact.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.7 GREENHOUSE GASES. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	☐	☐	☒	☐

SETTING

Greenhouse gases (GHGs) 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), and nitrous oxide (N_2O), creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space.

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 over 25 times more heat per molecule than CO_2, and N_2O absorbs 298 times more heat per molecule than CO_2. 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.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact.* 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.

Determining a threshold of significance for a project's climate change impacts poses a special difficulty for lead agencies. Much of the science in this area is new and is evolving constantly. At the same time, neither state nor local agencies are specialized in this area, and there are currently no local, regional, or state thresholds for determining whether the proposed project has a significant impact on climate change. The CEQA Amendments do not prescribe specific significance thresholds but instead leave considerable discretion to lead agencies to develop appropriate thresholds to apply to projects within their jurisdiction. Assembly Bill (AB) 32 sets statewide reduction mandates for emissions be reduced to 1990 levels by 2020, but to date neither the local air district (GCAPCD) nor the City of Orland have adopted GHG significance thresholds applicable to potential development.

In the absence of any GHG emissions significance thresholds from GCAPCD, the projected emissions are compared to MCAQMD, as Mendocino County is directly west of Glenn County. The efficiency-based threshold for MCAQMD is 4.6 metric tons of CO_2e per service

population (sum of all project-related jobs, patrons, and residents) per year. These thresholds were prepared with the purpose of complying with the requirements of AB 32 and achieving the goals of CARB's AB 32 Scoping Plan.

Project-related GHG emissions were quantified with CalEEMod. **Table 4.7-1** shows the estimated GHG emissions that would result annually with project implementation. Total construction-generated GHG emissions were amortized over the estimated life of the project. A project life of 30 years is assumed for the proposed project.

TABLE 4.7-1
CONSTRUCTION AND OPERATIONAL GHG EMISSIONS (METRIC TONS PER YEAR)

Source	CO_2e
Construction (amortized over 30 years)	18
Area Source	0
Energy Consumption	303
Mobile Source	871
Waste Generation	60
Water Demand	12
Total	**1,264**

*Source: CalEEMod, version 2016.3.1. See **Appendix 4.7** for daily emission model outputs.*

As shown in **Table 4.7-1**, estimated GHG emissions resulting from both construction and operations of the proposed project would total 1,264 metric tons of CO_2e per year.

According to ratios provided by the US Green Building Council, a 45,910-square-foot hotel and 6,000-square-foot, high-turnover, sit-down restaurant can be expected to generate approximately 86 jobs (USGBC 2008). In addition, the majority of people visiting nonresidential land uses would be customers and a smaller number of vendors. To estimate the number of customers and vendors that visit the site, the number of potential nonresidential-related daily vehicle trips is divided by two to account for each service population member making one trip to the nonresidential use and one trip from the nonresidential use; therefore, each project customer and vendor would count for two trips. This is a conservative assumption since each vehicle is assumed to accommodate only one person, whereas many of the vehicles would accommodate more than one person. As calculated from information provided in the traffic report, the proposed nonresidential uses would generate approximately 963 trips per day (**Appendix 4.16**). The total number of trips per day is divided by two to derive the service population attributable to customers and vendors (963/2 = 481). Therefore, the project service population is 567 (86 employees + 481 customers/vendors).

As shown in **Table 4.7-2**, dividing the GHG emissions by the service population yields a metric ton per service population ratio of 2.2 for year 2018 conditions.

TABLE 4.7-2
PROJECT GHG EMISSIONS PER SERVICE POPULATION

Per Capita Emissions	Emissions	Jobs	Customers /Vendors	Service Population	$MTCO_2e$/ SP/Year	Threshold	Exceed Threshold?
Year 2018	1,264	100	481	567	2.2	4.6	No

As shown in **Table 4.7-2**, the proposed project would not exceed the significance threshold. Therefore, the project's contribution of GHG emissions would be less than significant.

b) *Less than Significant Impact.* California is a significant emitter of GHG emissions and produced 477 million gross metric tons of carbon dioxide equivalent in 2008 (CARB 2014). Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2008, accounting for 36.4 percent of total GHG emissions in the state (CARB 2014). This category was followed by 24.3 percent in the electric power sector (including both in-state and out-of-state sources) (CARB 2014).

The City of Orland does not have local policies or ordinances with the purpose of reducing GHG emissions; however, California has adopted several policies and regulations for the purpose of reducing GHG emissions. On December 11, 2008, CARB adopted the AB 32 Scoping Plan to achieve the goals of AB 32, mentioned above. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. The proposed project is subject to compliance with AB 32, which is designed to reduce statewide GHG emissions to 1990 levels by 2020. As identified above, the proposed project-generated GHG emissions would not surpass GHG service population significance thresholds, which were prepared with the purpose of complying with the requirements of AB 32 and achieving the goals of AB 32. Therefore, the proposed project would not conflict with the state goals listed in AB 32 or in any preceding state policies adopted to reduce GHG emissions. This impact is less than significant.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.8 HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

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 in Title 22 of the California Code of Regulations, Section 662601.10, 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.*

Most hazardous material regulation and enforcement in Glenn County is managed by the Glenn County Public Health Department, which refers large cases of hazardous materials contamination or violations to the North Coast Regional Water Quality Control Board and the Department of Toxic Substances Control (DTSC). When issues of hazardous materials arise, it is not at all uncommon for other agencies to become involved, such as the applicable air pollution control district and both the federal and state Occupational Safety and Health Administrations.

According to the EnviroStor and GeoTracker hazardous materials databases, there are no known hazardous materials sites or hazardous materials spill sites on the project site. The only open active hazardous release site is the Orland Cleaners, just under 1 mile to the east. The Orland Cleaners is the apparent source of a groundwater plume that extends approximately 2.5 miles from the source in a southeast direction. This site is currently undergoing long-term monitoring by the DTSC for the release of tetrachloroethylene, which could impact groundwater (DTSC 2014).

DISCUSSION OF IMPACTS

a) *Less than Significant Impact*. Businesses that store hazardous materials are subject to the Hazardous Material Business Plan program, which is regulated by the Environmental Health Division of the Glenn County Public Health Department as part of the Certified Unified Program. The program requires the preparation of a document 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 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 what to do if materials are inadvertently released. Project operation would involve the routine transport, use, or disposal of hazardous materials in small quantities as they relate to hotel/commercial use. All hazardous materials on the site would be handled in accordance with city and state regulations. Therefore, the impact is less than significant.

b) *Less Than Significant Impact*. Construction activities associated with the proposed project could release hazardous materials into the environment through reasonably foreseeable upset and accident conditions. There is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for construction equipment. 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.

   Project operation would involve the routine transport, use, or disposal of hazardous materials in small quantities as they relate to hotel/commercial use. 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.

c) *No Impact*. The nearest public education facility is Orland High School, located at 101 Shasta Street, approximately 1 mile to the east. Therefore, there is no school site within one-quarter mile of the project. Additionally, if in the future a school was located near the project site,

General Plan Safety Hazard Program 3.5.A.3 requires that any use which uses or manufactures hazardous substances within one-quarter mile of any existing or proposed school only be permitted when authorized by a conditional use permit, with ample assurances that the students will not be placed in a hazardous environment. As such, the proposed project would have no impact in this area.

d) *No Impact*. According to the EnviroStor and GeoTracker databases, the project site does not have any known hazardous materials sites or hazardous materials spill sites. The only open active hazardous release site in the vicinity is the Orland Cleaners, located just under 1 mile east of the project site. Thus, no impact would occur in this regard.

e) *No Impact*. The project site is not located within an airport land use plan or within 2 miles of a public airport or private use airport. The closest airport, Haigh Field, is located approximately 3.5 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). Thus, no impact would occur.

f) *No Impact*. See Response 4.8(e). The project site is not located in the vicinity of a private airstrip. Thus, no impact would occur.

g) *No Impact*. 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.

The Glenn County Sheriff's Office has several means of notifying the public of emergencies and possible evacuations, which include a prerecorded telephone message from the Sheriff's Department, local radio and television station announcements, and the Emergency Broadcast System. In the event of extreme cases and/or the inability to contact residents in another manner, the Sheriff's Department would go door to door.

According to the Orland General Plan EIR, 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 (City of Orland 2010b).

The main thoroughfare in the proposed project is Newville Road. It would most likely be used as the main evacuation route connecting to I-5 for residents in the general area in an emergency. Since neither the City nor the County has an adopted emergency response or evacuation plan at this time, the project does not interfere with any such plans. No impact would occur for this issue area.

h) *Less Than Significant Impact*. The project site is not in an area designated by Cal Fire (2007) as a Fire Hazard Severity Zone. Furthermore, no Very High Fire Hazard Severity Zones are located nearby. Finally, the location of the project 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.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.9 HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of a failure of a levee or dam?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

SETTING

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. As mentioned in the City's (2014) Water Supply Capacity Study, Orland will need a total of three new wells by 2028 to supply water to the projected population at that time.

According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps, the project area is not located in a flood zone. While the Orland planning area has been identified as having the potential for dam inundation as a result of the failure of Black Butte Dam, the Orland General Plan Update DEIR determined that Black Butte Dam was in good condition.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact*. There is potential for the proposed project to result in degradation of water quality during both the construction and operational phases. Polluted runoff from the project site during construction and operation could include sediment from soil disturbances and oil and grease from heavy-duty equipment. The greatest potential source of water contaminants from the proposed project would be from erosion related to both construction and post-construction operations. This degradation could result in violation of water quality standards. The project would be required to prepare and comply with an approved stormwater pollution prevention plan. Compliance with this requirement would reduce the potential water quality impacts to less than significant.

b) *Less Than Significant Impact*. 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 project is anticipated to have a water demand of approximately 13,960 gpd. The City has determined that current water supplies are adequate to serve this development, and the project would not result in the increase of groundwater pumping beyond the City's current estimates. According to the City's (2014) Water Supply Capacity Study, Orland will need a total of three new wells by 2028 to supply water to the projected population at that time. Since the publication of this study, the Eva Drive well has been constructed and is expected to be in operation by 2017, thus increasing water production to the city.

   Additionally, the proposed project would have the potential to remove 2.57 acres of potential groundwater recharge area due to the development of this area with impervious surfaces. However, according to the Orland General Plan Update EIR (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 recharge.

c) *Less Than Significant Impact*. Construction activities during project site development, such as grading, excavation, and soil hauling, would disturb soils and potentially expose them to wind and water erosion. Similarly, proposed project operations would involve the use of heavy equipment and movement of materials and therefore could also disturb on-site soils. However, with the application of standard construction practices and regulatory requirements, soil erosion and loss of topsoil is not a concern for the site. Furthermore, the project site does not have any streams, creeks, or rivers on-site. Because the project site does not have any existing waterways, development of this area would not result in the alteration of an existing natural drainage patterns that would result in substantial erosion or siltation on- or off-site. There would be a less than significant impact in this area.

d) *Less Than Significant Impact*. 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 2.9.A of the General Plan (City of Orland 2003). Therefore, the proposed project would have a less than significant impact on causing flooding on- or off-site.

e) *Less Than Significant Impact*. Implementation of the proposed project would alter the existing drainage patterns on the site by resulting in changes to the amount of impervious surfaces. Polluted runoff from the project site during construction and operation could include sediment from soil disturbances; oil and grease from construction equipment, roadways, and parking lots; pesticides and fertilizers from landscaped areas; metals from paints; and gross pollutants such as trash and debris. Compliance with City storm drainage regulations, including Policy 2.9.A of the General Plan (City of Orland 2003), would reduce this impact to a less than significant level.

f) *Less Than Significant Impact*. See Responses 4.9(a) through 4.9(e).

g) *No Impact*. As mapped by the FEMA (2010) Flood Insurance Rate Mapping program, no portion of the proposed project is located in the 100-year floodplain.

h) *No Impact*. See Response 4.9(g).

i) *Less than Significant Impact*. While the Orland planning area has been identified as having the potential for dam inundation as a result of the failure of Black Butte Dam, the Orland General Plan Update DEIR determined that Black Butte Dam was in good condition. Therefore, an event such as the failure of Black Butte Dam has an extremely low probability (City of Orland 2010b). As such, the potential for flooding impacts would be less than significant.

j) *No Impact*. The project site is not located near an ocean or large body of water with potential for seiche or tsunami. The project area is not at risk for mudflows.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.10 LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

SETTING

The project site is located in an urban/agricultural interface area toward the western portion of the Orland city limits. The site is bordered on the east and south by agricultural land and scattered single-family homes. To the east is the Pilot Flying J Travel Center property which includes both heavy truck and automobile fueling stations, a fast food restaurant, a convenience store, and a trucker's lounge. To the north is vacant land, a few single-family homes, a commercial use, and a mobile home park.

As discussed in Section 2.0, Project Description, the project includes a zone change from Open Space (O-S) to Highway Service Commercial (C-H) to allow for commercial land uses to occur on APN 045-170-003.

DISCUSSION OF IMPACTS

a) *No Impact*. 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 mobile home park located to the north of the project site. The proposed project would not divide this community, as the project area is located south of the mobile home park. Therefore, implementation of the proposed project will not divide an established community.

b) *No Impact*. The project site would be annexed under the existing Orland General Plan land use designation of Commercial. The project site would be rezoned as C-H. The C-H zoning district allows for a variety of commercial use including hotels/motels and restaurants. Therefore, the proposed project would not conflict with either the General Plan land use designation or the zoning of the site. No impact would occur.

c) *No Impact*. The project site is not located in an adopted habitat conservation plan, natural community conservation plan, or other approved habitat conservation plan. Thus, no impacts would occur in this regard.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.11 MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

SETTING

According to the City of Orland General Plan Update DEIR (2010b), no mineral resource zones have been designated within the boundaries of the Orland planning area. Neither the City's existing General Plan nor the Glenn County General Plan identifies any mineral resources in the planning area.

DISCUSSION OF IMPACTS

a) *No Impact*. As previously mentioned, neither the City's existing General Plan nor the Glenn County General Plan identifies any mineral resources in the planning area. Therefore, no impacts would occur to mineral resources.

b) *No Impact*. See Response 4.11(a). There are no locally important mineral resource recovery sites within the project area delineated in the City or County General Plans.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.12 NOISE. Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or a public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

SETTING

According to the City's General Plan Noise Element, the major noise sources in Orland consist of I-5, State Route 32 (Walker Street), local traffic on city streets, commercial and industrial uses, active recreation areas of parks, outdoor play areas of schools, auto racing events at the fairgrounds, and occasional railroad operations.

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 an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear (in dBA).

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 (EPA 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.

Groundborne Vibration Fundamentals

Sources of earthborne vibrations include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or man-made causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions).

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. Another, the root mean square (RMS) velocity, is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.

For the purposes of this analysis, a PPV descriptor with units of inches per section (in/sec) is used to evaluate construction-generated vibration for building damage and human complaints. **Table 4.12-1**, displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in the table should be interpreted with care since vibration may be found to be annoying at much lower levels than those shown, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

TABLE 4.12-1
HUMAN REACTION AND DAMAGE TO BUILDINGS FOR CONTINUOUS OR FREQUENT INTERMITTENT VIBRATION LEVELS

Peak Particle Velocity (inches/second)	Human Reaction	Effect on Buildings
0.006–0.019	Range of threshold of perception	Vibrations unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level to which ruins and ancient monuments should be subjected
0.1	Level at which continuous vibrations may begin to annoy people, particularly those involved in vibration sensitive activities	Virtually no risk of architectural damage to normal buildings
0.2	Vibrations may begin to annoy people in buildings	Threshold at which there is a risk of architectural damage to normal dwellings
0.4–0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Architectural damage and possibly minor structural damage

Source: Caltrans 2004

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact.*

Construction Noise

Construction noise impacts depend on the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between noise sources and noise-sensitive receptors. Construction noise impacts primarily result when activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), when construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time.

Major noise-generating construction activities include removing existing structures, site grading and excavation, utility installation, laying foundations, cores, and shells, paving, and landscaping. The highest noise levels would be generated during the demolition of existing structures when impact tools are used (e.g., jackhammers, hoe rams) and during the construction of building foundations if impact pile driving is required to support the structure. Site grading and excavation activities would also generate high noise levels, as these phases often require the simultaneous use of multiple pieces of heavy equipment such as dozers, excavators, scrapers, and loaders. Lower noise levels result from building construction activities when these activities move indoors and less heavy equipment is required to complete the tasks. Construction equipment would typically include, but would not be limited to, earthmoving equipment and trucks, pile driving rigs, mobile cranes, compressors, pumps, generators, paving equipment, and pneumatic, hydraulic, and electric tools. Noise levels associated with individual construction equipment are summarized in **Table 4.12-2.**

TABLE 4.12-2
TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVELS

Equipment	Typical Noise Level (dBA L_{max}) 50 Feet from Source
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Vibrator	76
Crane, Mobile	83
Dozer	85
Generator	81
Grader	85
Impact Wrench	85
Jackhammer	88
Loader	85
Truck	88
Paver	89
Pneumatic Tool	85
Roller	74
Saw	76

Source: FTA 2006

As depicted in **Table 4.12-2**, noise levels generated by individual pieces of construction equipment typically range from approximately 74 dBA to 89 dBA L_{max} at 50 feet (FTA 2006). Construction noise levels drop off at a rate of about 6 dBA per doubling of distance between the noise source and the receptor. Since the nearest sensitive receptor is 200 feet away from the project site, maximum noise levels are expected to be 77 dBA.

General Plan Noise Element Policy 5.1.J states that noise associated with construction activities is exempt from all noise level standards, though Policy 5.1.K limits construction activities to the hours between 7:00 AM and 5:00 PM unless an exemption is received from the City to cover special circumstances. Because the proposed project would be consistent with the General Plan, this impact would be less than significant.

Operational Noise

The main source of operational noise for the proposed project is from vehicular use. Future noise levels throughout the plan area were modeled based on the traffic volumes identified by KD Anderson & Associates, Inc. (2016) (**Appendix 4.16**) to determine the noise level contours along plan area roadways. **Table 4.12-3** shows the calculated roadway noise levels under existing traffic levels compared to the condition of plan area buildout. The calculated noise levels at buildout in residential areas are compared to the City's noise standards listed in the General Plan.

TABLE 4.12-3
EXISTING PLUS PROJECT CONDITIONS PREDICTED NOISE LEVELS

Roadway Segment	L_{dn} at 100 Feet from Roadway Centerline		Noise Standard (dBA)	Exceeds Standard?	Affected Land Use
	Existing Conditions	Existing Conditions Plus Project			
Commerce Lane					
North of Newville Road	46.1	46.1	60-65	No	Residential
Newville Road to Ide Street	50.0	51.2	65	No	Transient Lodging
South of Ide Street	42.4	42.6	60-65	No	Residential

*Note: Traffic noise levels were calculated using the FHWA roadway noise prediction model. Refer to **Appendix 4.12** for noise modeling assumptions and results.*

Existing plus project noise levels 100 feet from the roadway centerlines in transient lodging areas range are 51.2 dBA L_{dn}. Noise levels in the residential areas range from 42.4 to 46.1 dBA L_{dn}. No street segments exceed the City's standards. Therefore, the impact is less than significant.

b) *Less Than Significant Impact.* Construction activities associated with the proposed project would likely require the use of various types of equipment, such as trucks, jackhammers, and haul trucks. Groundborne vibration levels associated with representative construction equipment are summarized in **Table 4.12-4**.

TABLE 4.12-4
TYPICAL VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	Peak Particle Velocity at 25 Feet (in/sec)
Large Bulldozer	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozers/Tractors	0.003

Source: FTA 2006; Caltrans 2004

Commonly recommended criteria for structural damage and human annoyance are 0.2 and 0.1 in/sec PPV, respectively (Caltrans 2002, 2004). Based on the vibration levels presented in **Table 4.12-4**, ground vibration generated by heavy-duty equipment would not be anticipated to exceed approximately 0.089 in/sec PPV at 25 feet. Predicted vibration levels at the nearest buildings and sensitive receptors would not exceed recommended criteria for structural damage nor human annoyance. As a result, this impact would be considered less than significant.

Once operational, the project would not be a source of groundborne vibration. For the reasons described, the generation of groundborne vibrations would be less than significant during construction and operation of the project.

c) *Less Than Significant Impact.* The primary factor contributing to the ambient noise environment as a result of the proposed development would be the increase of vehicular traffic. For a community noise environment, changes in outdoor noise levels of 3 dBA are generally considered a just-perceivable difference. Therefore, the threshold of significance is an increase of 3 dBA or more. **Table 4.12-5** shows existing noise levels with and without the proposed project.

TABLE 4.12-5
EXISTING PLUS PROJECT CONDITIONS PREDICTED INCREASES IN TRAFFIC NOISE LEVELS

Roadway Segment	L_{dn} at 100 Feet from Roadway Centerline		Increase	Threshold	Impact?	Affected Land Use
	Existing Conditions	Existing Conditions Plus Project				
Commerce Lane						
North of Newville Road	46.1	46.1	0.0	>3.0	No	Residential
Newville Road to Ide Street	50.0	51.2	1.2	>3.0	No	Transient Lodging
South of Ide Street	42.4	42.6	0.2	>3.0	No	Residential

*Note: Traffic noise levels were calculated using the FHWA roadway noise prediction model. Refer to **Appendix 4.12** for noise modeling assumptions and results.*

As shown, all noise increases are projected to be less than 3 dBA and would not result in a substantial permanent increase in traffic noise. Therefore, the proposed project would result in a less than significant impact related to a substantial permanent increase in ambient noise levels.

d) *Less Than Significant Impact.* Noise associated with the construction of and surface paving for the proposed project will result in short-term and intermittent noise. As discussed in Impact a), the proposed project will abide by Policy 5.1.K of the General Plan Noise Element limiting construction activities to the hours between 7:00 AM and 5:00 PM unless an exemption is received from the City to cover special circumstances. Therefore, the proposed project would result in a less than significant impact related to a substantial temporary or periodic increase in ambient noise levels.

e) *No Impact.* The project is not located within 2 miles of an airport.

f) *No Impact.* The project is not located in the vicinity of a private airstrip.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.13 POPULATION AND HOUSING. Would the project:				
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

SETTING

According to the California Department of Finance (2016), the current population of Orland is approximately 7,676, with 2,411 occupied dwelling units. No housing exists on the site.

DISCUSSION OF IMPACTS

a) *Less than Significant*. The proposed project may result in an increase of population as potential new employees and their families move to the area. However, this increase would not be substantial. The USGBC has identified the average square footage per employee for different types of land uses. The average square footage per employee for lodging is 1,124 and the average square foot per employee for a sit-down restaurant is 134 (USGBC 2008). Based on this information, the 45,910-square-foot hotel would have 41 employees and the 6,000-square-foot restaurant would have 45 employees, totaling 86 employees. Assuming at least a portion of these employees would come from the surrounding area, the potential for a substantial population increase would be less than significant.

b) *No Impact*. The project site is a partially developed lot. However, the project would not displace any housing, as the applicant has indicated that the existing structure is set to be demolished.

c) *No Impact*. The project site is a partially developed lot. However, the project would not displace any people, as the applicant has indicated that the existing structure is set to be demolished.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.14 PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

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, in Orland, the Police Department seeks to maintain an officer per citizen ratio of 1.9 sworn officers per 1,000 residents (City of Orland 2010b). Further, in 2003, the Orland City Council set the park dedication standard at 8.4 acres per 1,000 residents (City of Orland 2010b). Finally, the average response time for fire protection and emergency medical services in Orland is 3 to 5 minutes for arrival at the station, approximately 1 minute to prepare and leave the station, and an additional 2 to 3 minutes to the actual call site (City of Orland 2010b).

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact*. While implementation of the proposed hotel and restaurant may result in increased calls for fire services, the increase in calls is not anticipated to contribute to the need for the construction or expansion of fire facilities. The project will be served by the Orland Fire Department, located at 810 Fifth Street, approximately a mile from the project site. Response service to the site would be within the Orland Fire Department's average response times. As such, development of the site would not require a new station or expansion of the existing fire station.

b) *Less Than Significant Impact*. While implementation of the proposed hotel and restaurant may result in increased calls for police services, the increase in calls is not anticipated to contribute to the need for the construction or expansion of police facilities. The project will be served by the Orland Police Department, located at 817 Fourth Street, approximately a mile from the project site.

c) *No Impact*. The proposed project does not propose any housing and would not include any other components that would result in an increased demand for schools. As such, there would be no need for additional facilities to maintain acceptable service ratios for schools. No impact would occur.

d) *No Impact*. The proposed project does not propose any housing and would not include any other components that would result in an increased demand for parks. As such, there would be no need for additional facilities to maintain acceptable service ratios for parks. No impact would occur.

e) *No Impact*. While the project is projected to employ up to 86 persons, these employees are anticipated to come from surrounding areas; therefore, the project would not increase the area's population. The proposed project would not result in an increased demand from other public services, such as libraries. As such, there would be no need for additional facilities to maintain acceptable service ratios. No impact would occur.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.15 RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

SETTING

The National Recreation and Park Association (NRPA) has developed area standards that have been traditionally applied to assess demand for parkland in cities. The NRPA standards recommend a range of 6 to 10.5 acres of developed parkland per every 1,000 residents. The City of Orland currently has approximately 53 acres of improved parks and facilities for its population. This places Orland just above the midpoint of the published NRPA acreage range for parkland based on a population of 6,281 (reported in January 2001). This also suggests that the City should be in the acquisition process to meet the needs of expected growth (City of Orland 2003).

DISCUSSION OF IMPACTS

a) *No Impact*. The proposed project will not result in the construction of any new residential units; therefore, the use of existing parks and other recreational facilities will not be increased and no new or expanded facilities will be required. As such, implementation of the proposed project would have no impact to recreation.

b) *No Impact*. See Response 4.15(a).

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.16 TRANSPORTATION/TRAFFIC. Would the project:				
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	☐	☒	☐	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

SETTING

The proposed project will be served by several major roadways. Regional access is provided by I-5 and SR 32, which link the site with other Northern California communities to the north and south and with Orland to the east. Local access to the project site is provided via Newville Road and Commerce Lane.

Presently there are no formally designated bicycle lanes or bicycle facilities in 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 rights-of-way of undergrounded canals. Additionally, street widths can accommodate bicycle traffic in some areas and bicycle racks are available at schools and parks.

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 Ninth Street/Newville Road intersection (i.e., CVS Pharmacy and Burger King).

A traffic impact assessment (TIA) was completed by KD Anderson & Associates, Inc. for the proposed project. This TIA is included in **Appendix 4.16.**

The proposed project site is located on the northwestern corner of Commerce Lane (formerly County Road HH) and Ide Street (formerly County Road 13), approximately 800 feet south of the Newville Road/Commerce Lane intersection. As shown in **Table 4.16-1**, recent improvements to the Newville Road/Commerce Lane intersection resulted in a current level of service (LOS) operation of LOS A in the weekday AM peak hour and LOS B during the PM peak hour (KD Anderson 2016).

TABLE 4.16-1
CURRENT PEAK HOUR LEVEL OF SERVICE AT NEWVILLE ROAD / COMMERCE LANE

Control	AM Peak Hour		PM Peak Hour	
	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
All-way Stop	10.0	A	12.9	B

Source: KD Anderson 2016

The City's minimum standard is LOS D. Existing volumes do not reach the level that justifies a traffic signal based on the Manual on Uniform Traffic Control Devises traffic signal warrants.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact with Mitigation Incorporated.* The amount of new traffic accompanying the proposed project has been identified based on the Institute of Transportation Engineers (ITE) trip generation rates for High Turnover/Sit-down Restaurant and Hotel categories. This traffic was then added to current traffic volumes to create the "Plus Project" condition. Levels of service were then recalculated to determine if this project will result in conditions in excess of minimum City standards (LOS D).

Newville Road and Commerce Lane would act as the primary roadway facilities serving the project site. Newville Road west of I-5 is a Glenn County road outside of the City that extends for roughly 7 miles to the Tehama County line near Black Butte Lake. This portion of Newville Road is designated a minor arterial in the Glenn County General Plan Circulation Element and an arterial in the City of Orland General Plan Circulation Element. Newville Road is a two-lane rural road west of I-5 with a posted speed limit of 35 mph.

Commerce Lane/County Road HH is a north–south roadway that runs southerly from an intersection on County Road 12 across Newville Road to its southern terminus on County Road 15 (Newport Road). Within the city boundaries, this roadway is called Commerce Lane. Upon leaving city limits, the roadway reverts to its original name of County Road HH. Commerce Lane/County Road HH provides access to existing highway commercial, light industrial, and residential uses west of I-5. Commerce Lane is designated a minor collector in the Orland Circulation Element. Today the portion of Commerce Lane near the project is a two-lane rural road.

Existing Traffic Plus Project Conditions: The project's trips were superimposed onto the current background volumes to create Plus Project conditions, and levels of service were recalculated. As noted in **Table 4.16-2**, the addition of project trips does not appreciably change current traffic operations, and LOS B conditions will remain. Projected traffic volumes remain well below the level that would justify a traffic signal.

TABLE 4.16-2
CURRENT PEAK HOUR LEVEL OF SERVICE AT NEWVILLE ROAD / COMMERCE LANE – WITH PROJECT

Control	AM Peak Hour				PM Peak Hour			
	Existing		Existing Plus Project		Existing		Existing Plus Project	
	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
All-way Stop	10.0	A	10.8	B	12.9	B	14.0	B

Source: KD Anderson 2016

Cumulative Traffic Conditions. Project trips were superimposed onto the long-term traffic volumes presented in the Pilot Flying J Travel Center Street Study to identify the significance of the project's cumulative impacts. Resulting traffic volumes are presented in Figure 5, and conditions with and without the proposed project are summarized in **Table 4.16-3**. Assuming that no improvements are made, the intersection is projected to operate at LOS D in the future with the project, and LOS D satisfies the City's minimum standard.

However, as noted in the Pilot Flying J Travel Center EIR (City of Orland 2015), a traffic signal is included in the City's traffic impact fee program, and a signal may be required in the future to accommodate the coordinated operation of multiple signals on SR 32, and projected volumes satisfy peak hour traffic signal warrants.

The project's PM peak hour trips through the Newville Road/Commerce Lane intersection (i.e., 103 trips) represent 19 percent of the total net new trips under Cumulative plus Project conditions (i.e., 103/536 = 19%).

TABLE 4.16-3
CUMULATIVE PEAK HOUR LEVEL OF SERVICE AT NEWVILLE ROAD / COMMERCE LANE – WITH PROJECT

Control	AM Peak Hour				PM Peak Hour			
	Cumulative		Cumulative Plus Project		Existing		Cumulative Plus Project	
	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
All-way Stop	14.7	B	17.3	C	24.9	C	30.2	D

Source: KD Anderson 2016

The proposed project's impact to the roadway system is less than significant since the project's contribution to local traffic would not surpass City General Plan thresholds. However, the City requires the payment of fees as a part of the City's traffic impact fee program. The payment of this fee would assist the installation of a signal at the Newville Road/Commerce Lane intersection in the future to accommodate the coordinated operation of multiple signals on SR 32. Mitigation measure **MM 4.16.1** requires the payment of this fee and would reduce the project's impact to a less than significant level.

b) *Less Than Significant Impact*. See Response 4.16(a). According to General Plan Circulation Element Policy 2.3.A, traffic impacts are considered significant if they result in traffic that exceed an overall daily roadway LOS C with an AM and PM peak-hour roadway and

intersection LOS D or better. As shown in **Tables 4.16-2** and **4.16-3**, the proposed project's contribution to local traffic would not surpass these City General Plan thresholds.

c) *No Impact*. The project site is not located within an airport land use plan. The closest airport, Haigh Field, is located approximately 3.5 miles southeast of the project site. The site is not located within 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).

d) *Less than Significant Impact*. No design features associated with the proposed project would increase hazards. Primary access to the project site would be provided from Commerce Lane or Ide Street. All proposed improvements to these roadways, including pavement, sidewalks, curbs and gutters, would be required to comply with city roadway standards. Interior driveway and parking facilities would also be required to comply with city standards. While the proposed project is located within an area that has agricultural uses, all roadways in the area are designed using either city or county roadway standards. Implementation of the proposed project would not result in the removal or degradation of existing roadway safety features. No dangerous curves, dangerous intersections, or incompatible interaction with farm vehicles would result due to project implementation.

e) *No Impact*. The area currently benefits from a network of roadways that provide access around the area. The site plan indicates that the project will have multiple points of access and that the individual parking lots for each land use are linked. Emergency vehicles would access the site from either one entrance on Commerce Lane or two entrances on Ide Street. There is no impact from the proposed project.

f) *No Impact*. Currently, the City does not have a bicycle or trails plan. All bicycle and pedestrian facilities are guided by policies and programs in the General Plan. For example, Policy 2.7.A requires adequate sidewalks to be constructed in connection with street construction work in the city. Policy 2.7.B requires subdivisions to include designs that promote pedestrian circulation in a safe and efficient manner, and Policy 2.7.C requires bicycle lanes to be established where feasible along major and minor collectors in newly developing areas.

The proposed project includes improvements to Commerce Lane and Ide Street adjacent to the site. For those areas of the site that directly border these streets, the project will be required to add curbs, gutters, and sidewalks. These improvements will assist in the creation of pedestrian pathways adjacent to the site.

Bus service is provided to the City of Orland through Glenn Ride. This system provides seven round trips every weekday and three round trips on Saturday from Willows to Chico. There are currently 14 bus stops in Orland. The project would not interfere with the ability of Glenn Ride to continue service to the area.

These transit options would remain intact and not otherwise be affected by the project. Therefore, impacts related to existing alternative transportation would not result from the project, and the proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation.

Mitigation Measures

MM 4.16.1 The project applicant shall contribute its fair share (19%) to the cost of installing a traffic signal at the Newville Road/Commerce Lane intersection.

While an all-way stop would deliver an adequate level of service at this time, traffic signal warrants, requiring the addition of a traffic signal in the future, are projected to be met at this intersection. The addition of a traffic signal at the Newville Road/Commerce Lane intersection is identified in the City General Plan EIR and is in the City's traffic impact mitigation fee program. Because this improvement is not required solely as a result of the proposed project, the project applicant shall contribute its fair share to the cost of this mitigation. The project's PM peak hour trips through the Newville Road/Commerce Lane intersection (i.e., 103 trips) represent 19 percent of the total net new trips under Cumulative plus Project conditions (i.e., 103/536 = 19%).

Timing/Implementation: *Prior to occupancy*

Enforcement/Monitoring: *City of Orland Engineer, City of Orland Planning Department*

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.17 UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

SETTING

Water Supply

The City of Orland will provide water service to the project site. Existing water lines are located in Newville Road as well as Commerce Lane. The source of water supply for Orland is groundwater pumped from six wells that produce between 350 to 1,090 gallons per minute (gpm). The wells are located throughout the city and range in depth from 150 feet to 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 inches to 10 inches. The water system is operated at 50 to 65 pounds per square inch (psi) pressure under normal demand. The six wells are capable of producing 5,130 gallons per minute at 55 psi system pressure. (City of Orland 2014)

Wastewater

All sewage is collected and processed by the Orland Wastewater Facility. The Wastewater Facility utilizes a primary treatment process consisting of a Muffin Monster 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.

According to the City's Public Works Department, the City's wastewater facility currently has an average flow of 0.65 mgd, with a peak flow of 1.12 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 currently operating at about 31 percent of capacity (City of Orland 2014).

Storm Drainage

The project proposes to construct an on-site drainage system that would collect drainage at various points throughout the site and route it through a new on-site drainage system that will prevent a net increase in water flow from pre- to post-development. The ultimate discharge point is into an existing system on Commerce Lane. All proposed drainage improvements would be constructed on the project site.

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. According to CalRecycle (2014), 99 percent of all solid waste in the county was disposed of at the Glenn County Landfill. The landfill is located at the west end of County Road 33, near Artois. This landfill is the only waste disposal area in Glenn County.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact.* The proposed project may result in impacts to the City's wastewater processing requirements. However, the project would be required to connect to the City's wastewater facility, which currently operates in compliance with all applicable existing regulatory requirements. In addition, the 2009 Sewer Master Plan includes recommended facility and management program upgrades to ensure compliance with anticipated future regulatory requirements. Since any future projects would be required to connect to the City's wastewater facilities, the project would have a less than significant impact on the wastewater processing requirements of the Central Valley Regional Water Quality Control Board.

b) *Less Than Significant Impact.* The proposed project would result in 2.57 acres of new commercial uses. According to the Orland Sewer Master Plan (2009), commercial uses are equal to 5.4 housing equivalents per acre (Orland 2009, Appendix B, Table 4). A housing equivalent is defined in the Sewer Master Plan as an "area that will produce the same amount of wastewater flow as one single family home within a low-density location" (City of Orland 2009). Using these factors, the project has the potential to result in 14 housing

equivalents[1]. In other words, the area would generate the same amount of wastewater as approximately 14 low-density single-family homes, or 6,034 gallons per day (gpd) under current conditions.[2]

Wastewater generated by the hotel and restaurant would be conveyed to the City's wastewater facility for processing via existing sewer collection facilities located in Commerce Lane. The current capacity of the plant is 2.1 mgd; the wastewater facility treats an average 1.3 mgd and is capable of treating up to 3.4 mgd during peak wet weather flow. Therefore, the addition of 0.006 mgd of project-generated wastewater would not exceed the facility's capacity and would not require the construction of a new wastewater treatment facility or result in the need for modifications to the existing facility. The impact is less than significant.

Development of the project would also increase the demand for water in the city. According to the Energy Star Portfolio Manager, the median hotel water use is 102 gallons per room per day (EPA 2012). Since the hotel will have 80 rooms, the daily water usage at full capacity is expected to be 8,160 gpd. According to Powerhouse Dynamics (2016), restaurants use an average of 5,800 gpd. Therefore, the combined water use of the hotel and restaurant is expected to be 13,960 gpd. The City's current water supply capacity is approximately 7,387,200 gpd. The project's water demand of 13,960 gpd would not result in the need for additional water supply and would not require the construction of new water production or treatment facilities. The impact is less than significant.

c) *Less Than Significant Impact.* Implementation of the proposed project would increase the amount of impervious surfaces on the project site, resulting in greater stormwater runoff potential. The project proposes to construct an on-site drainage system that would collect drainage at various points throughout the site and route it through the existing detention basin and the ultimate discharge point, Commerce Lane. All proposed drainage improvements would be constructed on the project site. As such, impacts related to their construction are considered throughout this document as part of the proposed project and mitigated when applicable. Therefore, this impact would be less than significant.

d) *Less Than Significant Impact.* See Response 4.17(b).

e) *Less Than Significant Impact.* See Response 4.17(b).

f) *Less Than Significant Impact.* The City of Orland is a member of the Glenn County Waste Management Regional Agency. CalRecycle provides solid waste disposal and recycling information for jurisdictions in the state, including the Glenn County Waste Management Regional Agency. According to CalRecycle (2014), 99 percent of all solid waste in the county was disposed of at the Glenn County Landfill. The landfill is located at the west end of County Road 33, near Artois. This landfill is the only waste disposal area in Glenn County.

The Glenn County Landfill, which had a cease operation date of July 1, 2016, will remain open until an alternative landfill site has been identified. Total capacity of the Glenn County Landfill is 2,400,000 cubic yards. The remaining capacity, as of June 8, 2010, was 348,223 cubic yards. The maximum tonnage per day permitted is 200 tons (CalRecycle 2014). According to CalRecycle (2016), solid waste generation rates are 4 pounds per room per

[1] Wastewater housing unit equivalents (HE) for commercial projects = 5.4 HE per acre. The project site is 2.57 acres. Therefore, 2.57 acres x 5.4 HE/acres = 14 housing unit equivalents.
[2] Current wastewater flow per single-family home in the city is 431 gpd or 431 gpd per HE (City of Orland 2014). Therefore, 14 HEs x 431 gpd = 6,034 gpd (0.006 mgd) of wastewater.

day for hotels and 1 pound per seat per day for restaurants (assuming 50 percent of restaurant is seating and there are 16 square feet per seat). Based on this information, the hotel would produce approximately 320 pounds per day and the restaurant would produce 187.5 pounds per day. The total daily waste for the project is expected to be 507.5 pounds per day.

The project is required to comply with all state, county, and city regulations for solid waste disposal. The addition of solid waste to the landfill resulting from project development would not increase the tonnage beyond the landfill's permitted amount. During 2012, solid waste coming from the county was also disposed of at eight other solid waste disposal facilities. Upon the closure of the Glenn County Landfill, alternative landfills would be used to dispose of solid waste produced in Glenn County, including the proposed project's waste. As a result, development of the proposed project would have a less than significant impact on solid waste disposal.

g) *Less Than Significant Impact*. The proposed project will comply with all state and federal statutes regarding solid waste.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.18 MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to 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, reduce the number or restrict the range of rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.	☐	☒	☐	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact With Mitigation Incorporated*. Three Initial Study subsections have identified the potential for significant environmental impacts: subsections 4.4 Biological Resources, 4.5 Cultural Resources, and 4.16 Transportation/Traffic. However, with implementation of mitigation measures proposed in these subsections, these potential impacts would be reduced to levels that are considered less than significant.

b) *Less Than Significant Impact With Mitigation Incorporated*. Implementation of the proposed project, in conjunction with other approved or pending projects in the region, has the potential to result in potentially cumulative impacts to the physical environment for analysis areas, including noise. However, with implementation of mitigation measures proposed in the relevant subsections of this Initial Study, these potential impacts would be reduced to levels that are considered less than significant.

c) *Less Than Significant Impact With Mitigation Incorporated*. With implementation of the proposed mitigation measures, the project will not result in adverse impacts on human beings.

5.0 REFERENCES

5.1 DOCUMENTS REFERENCED IN INITIAL STUDY AND/OR INCORPORATED BY REFERENCE

Cal Fire (California Department of Forestry and Fire Protection). 2007. Glenn County Fire Hazard Severity Zone Map. http://www.calfire.ca.gov/fire_prevention/fhsz_maps_glenn.php.

California Department of Finance. 2016. *City of Orland Demographics.* http://cityoforland.com/business/city_demographics.asp

CalRecycle (California Department of Resources Recycling and Recovery). 2014. CalRecycle website. http://www.calrecycle.ca.gov/LGCentral/Reports /DRS/Destination/JurDspFa.aspx.

———. 2016. *Estimated Solid Waste Generation Rates.* https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates.

Caltrans (California Department of Transportation). 2002. *Transportation Related Earthborne Vibrations.*

———. 2004. *Transportation and Construction-Induced Vibration Guidance Manual.*

CAPCOA (California Air Pollution Control Officers Association). 2009. *Health Risk Assessments for Proposed Land Use Projects.*

CARB (California Air Resources Board). 2014. California Greenhouse Gas Emission Inventory: 2000-2012.

———. 2016. Area Designations Maps / State and National. http://www.arb.ca.gov/desig/adm/adm.htm.

CDFW (California Department of Fish and Wildlife). 1994. *Staff Report Regarding Mitigation of Impacts to Swainson's Hawk (Buteo swainsoni) in the Central Valley of California.* Sacramento: CDFW.

———. 2014. California Wildlife Habitat Relationships System (online edition). Sacramento: CDFW Biogeographic Data Branch. https://www.wildlife.ca.gov/Data/CWHR/Wildlife-Habitats.

City of Orland. 2003. *City of Orland General Plan 2003-2020.* http://cityoforland.com/govt/dept/planning/documents/CurrentGeneralPlanMarch2003.pdf

———. 2009. *City of Orland Sewer Master Plan.* http://cityoforland.com/_documents/SEWERMASTERPLAN.pdf.

———. 2010a. *City of Orland General Plan 2008–2028.* http://www.cityoforland.com/govt/dept/planning/forms.asp.

———. 2010b. *General Plan Update Draft Environmental Impact Report,* SCH No. 2008102073. http://www.cityoforland.com/_documents/OrlandGeneralPlanDEIR27-0153_FINAL6-25.pdf.

———. 2014. *Water System Capacity Study.*

———. 2015. *Pilot Flying J Travel Center and Westside Annexation Area Project Draft Environmental Impact Report* (SCH#2014102084).

DOC (California Department of Conservation). 2014a. Important Farmland Finder. http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.

———. 2014b. *Glenn County Williamson Act FY 2013/2014*. ftp://ftp.consrv.ca.gov/pub/dlrp/wa/.

DTSC (California Department of Toxic Substances Control). 2014. EnviroStor database. https://www.envirostor.dtsc.ca.gov/public/.

DWR (California Department of Water Resources). 2006. *California Groundwater Bulletin 118 Sacramento Valley Groundwater Basin, Colusa Subbasin*. http://www.water.ca.gov/pubs/groundwater/bulletin_118/basindescriptions/5-21.52.pdf.

EPA (United States Environmental Protection Agency). 1971. *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*.

———. 2011. *EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy Duty Vehicles*. https://www3.epa.gov/otaq/climate/documents/420f11031.pdf

———. 2012. *Data Trends: Water Use Tracking*. https://www.energystar.gov/ia/business/downloads/datatrends/DataTrends_Water_20121002.pdf?2003-40fb

FEMA (Federal Emergency Management Agency). 2010. Flood Insurance Rate Maps.

FTA (Federal Transit Administration). 2006. *Transit Noise and Vibration Impact Assessment.*

GCALUC (Glenn County Airport Land Use Commission). 1991. *Comprehensive Airport Land Use Plan Orland Haigh Field Airport.*

KD Anderson (KD Anderson & Associates, Inc.) 2016. *Traffic Impact Assessment for Hotel / Restaurant Near Flying J Truck Stop in Orland, Ca.*

MCAQMD (Mendocino County Air Quality Management District). 2010. Adopted Air Quality CEQA thresholds of Significance. http://www.co.mendocino.ca.us/aqmd/pdf_files/MCAQMDCEQARecomendations.pdf

NCRC (Northern California Resource Center). 2015. *Archaeological Resource Survey Report for the Proposed Pilot Flying J Travel Center Project*.

Powerhouse Dynamics. 2016. *Water, Water Everywhere... and 10 Ways for Restaurants to Stem the Flow*. https://powerhousedynamics.com/resources/white-papers/water-water-everywhere-and-10-ways-restaurants-stem-flow/

USGBC (US Green Building Council). 2008. *Building Area per Employee By Business Type.*